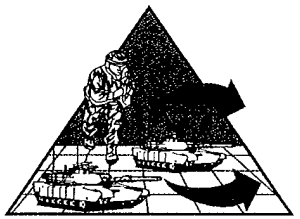


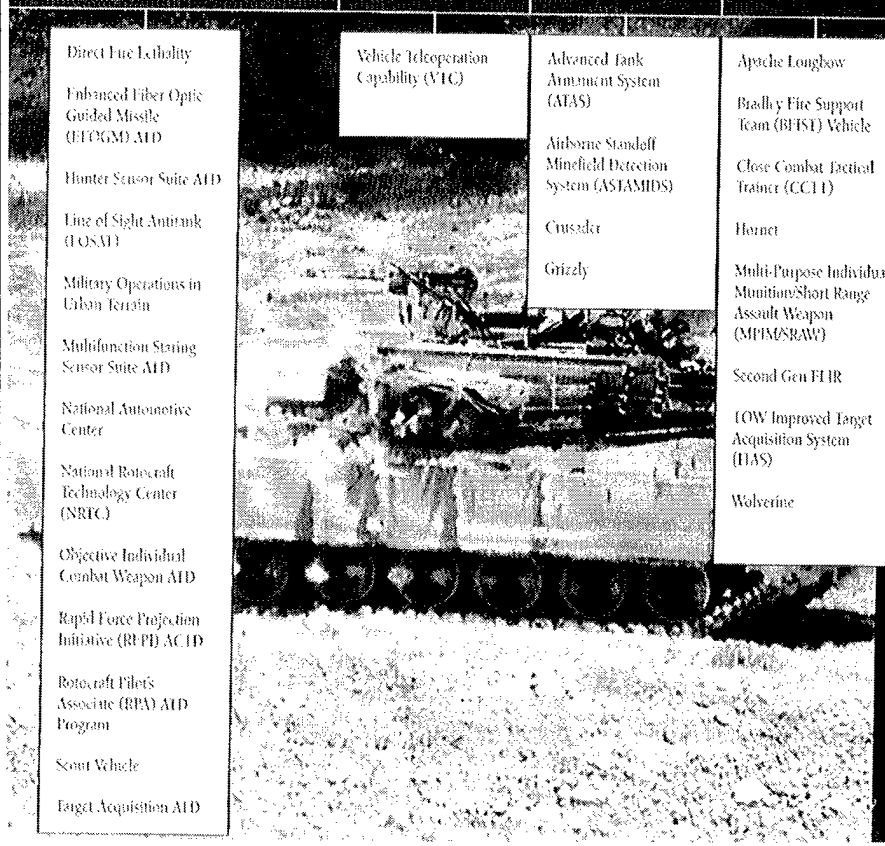
Tomorrow's Army will be a smaller force, but with just as many, if not more, crises to respond to on behalf of the nation. As a result, Army forces will need improved firepower, improved mobility and greater situational awareness if they are to maintain their effectiveness. The Army of the future must be able to dominate the maneuver battlefield, despite and because of its smaller size. The smaller size means the Army of the future will have less margin for error and so must maximize the combat power of each soldier. The Army must pursue weapon systems with greater ranges, greater accuracy and greater firepower. The Army must also acquire systems that will extend the all-weather/night fighting capabilities of its forces.

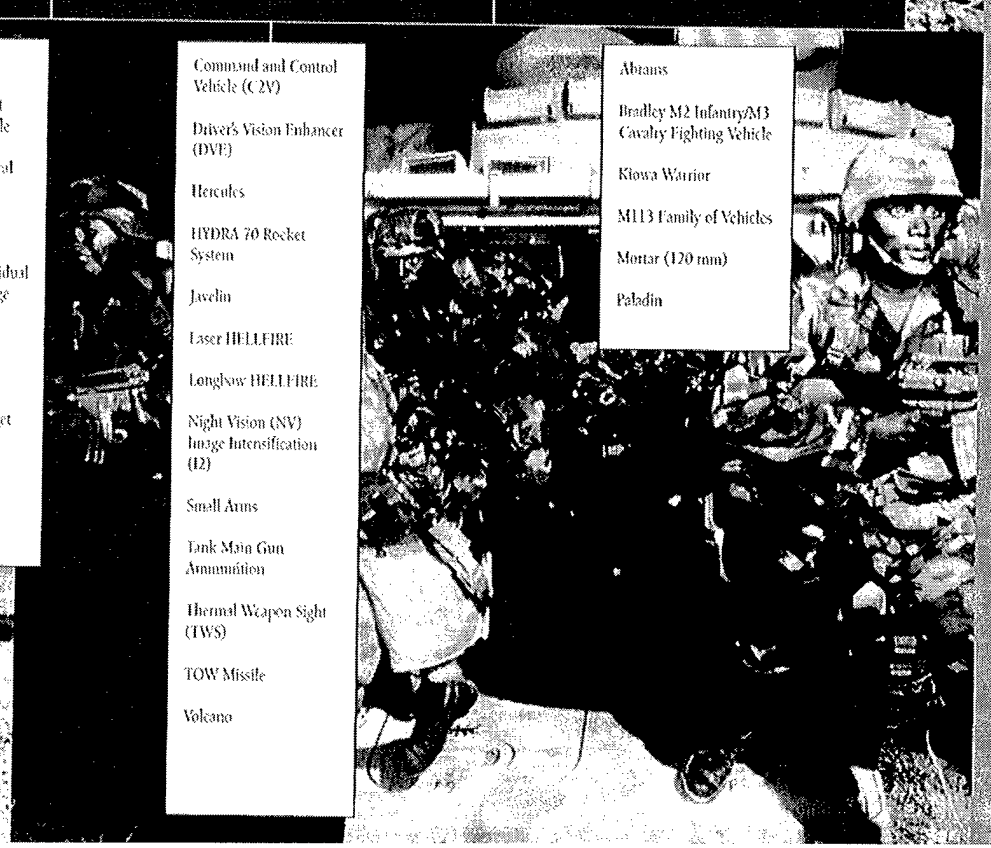
Army modernization efforts to Dominate the Maneuver Battle fall into two categories: upgrades and new systems. The first category covers Army programs to greatly enhance the capabilities of its existing systems. The upgrades to the Abrams tank and the Bradley Fighting Vehicle System (BFVS) will improve the communications and data processing systems, the night-fighting capabilities and the survivability of the vehicles. The Driver's Vision Enhancer (DVE) and the 2nd Generation Forward Looking Infrared (2nd Gen FLIR) are two examples of these upgrades. The Apache Longbow program will vastly improve the ability the Apache attack helicopter to track and engage a large number of air and ground targets. The Apache will also add the 2nd Gen FLIR. Digitization upgrades to all platforms will allow them to operate more efficiently as part of an integrated whole.

The Army is also acquiring several new systems that will greatly improve the ability of its forces to prosecute a ground war. The Crusader is a revolutionary artillery system, using a Regenerative Liquid Propellant Gun and an automated loading system. Crusader also requires 3 fewer crewmen than previous self-propelled artillery systems. The new Command and Control Vehicle (C2V) will allow C2 "on the move" from an armored vehicle that can keep pace with Bradley and Abrams. To improve its mobility, the Army is also enhancing its combat engineering capabilities with the acquisition of the Grizzly breaching vehicle and the Wolverine heavy assault bridge vehicle.

This combination of improved firepower, improved mobility and improved situational awareness will make tomorrow's Army maneuver forces a very powerful tool. By maintaining a tremendous technological advantage over potential adversaries, the Army will retain its ability to Dominate the Maneuver Battle and will continue to be a strong deterrent to would be aggressors.

Science and Technology	Concept	Dem/Val	EMD	Production and Deployment	Operations and Support
Direct Fire Lethality	Vehicle Teleoperation Capability (VTC)	Advanced Tank Armament System (ATAS)	Apache Longbow	Command and Control Vehicle (C2V)	Abrams
Enhanced Fiber Optic Guided Missile (EFOGM) ATD		Airborne Standoff Minefield Detection System (ASTAMIDS)	Bradley Fire Support Team (BFIST) Vehicle	Driver's Vision Enhancer (DVE)	Bradley M2 Infantry/M3 Cavalry Fighting Vehicle
Hunter Sensor Suite ATD		Crusader	Close Combat Tactical Trainer (CCTT)	Hercules	Kiowa Warrior
Line of Sight Antitank (LOSAT)		Grizzly	Hornet	HYDRA 70 Rocket System	M113 Family of Vehicles
Military Operations in Urban Terrain			Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW)	Javelin	Mortar (120 mm)
Multifunction Staring Sensor Suite ATD			Second Gen FLIR	Laser HELLFIRE	Paladin
National Automotive Center			TOW Improved Target Acquisition System (ITAS)	Longbow HELLFIRE	
National Rotorcraft Technology Center (NRTC)			Wolverine	Night Vision (NV) Image Intensification (I2)	
Objective Individual Combat Weapon ATD				Small Arms	
Rapid Force Projection Initiative (RFPI) ACTD				Tank Main Gun Ammunition	
Rotorcraft Pilot's Associate (RPA) ATD Program				Thermal Weapon Sight (TWS)	
Scout Vehicle				TOW Missile	
Target Acquisition ATD				Volcano	





Dominate the Maneuver Battle

MISSION: The Abrams tank provides heavy armor superiority on the battlefield.

CHARACTERISTICS: The Abrams tank closes with and destroys enemy forces on the integrated battlefield using mobility, firepower, and shock effect. The 105 mm main gun on the M1 and IPM1 and the 120 mm main gun on the M1A1 and M1A2, combined with the powerful 1,500 hp turbine engine and special armor, make the Abrams tank particularly suitable for attacking or defending against large concentrations of heavy armor forces on a highly lethal battlefield. Additional features of the M1A1 are increased armor protection, suspension improvements, and an NBC protection system that provides additional survivability in a contaminated environment. The M1A2 program builds on the M1A1 to provide an Abrams tank with the necessary improvements in lethality, survivability, and fightability required to defeat advanced threats. The M1A2 includes a Commander's Independent Thermal Viewer, an Improved Commander's Weapon Station, position navigation equipment, a distributed data and power architecture, embedded diagnostic system, improved fire control system, and a radio interface unit that allows, through the SINCGARS radio, rapid transfer of digital situational data and overlays to compatible systems on the digital battlefield.

	M1/IPM1	M1A1	M1A2
Length:	32.04 ft	32.25 ft	32.25 ft
Width:	12.0 ft	12.0 ft	12.0 ft
Height:	7.79 ft	8.0 ft	8.0 ft
Top speed:	45.0/41.5 mph	41.5 mph	41.5 mph
Weight:	61.4/62.8 tons	67.6 tons	68.4 tons
Armament:	105 mm	120 mm	120 mm
Crew:	4	4	4

FOREIGN COUNTERPART: France: LeClerc; Germany: Leopard 2; Israel: Merkava Mk. 3; Italy: C1 Ariete; Russia: T-64, T-72, and T-80; United Kingdom: Challenger 2

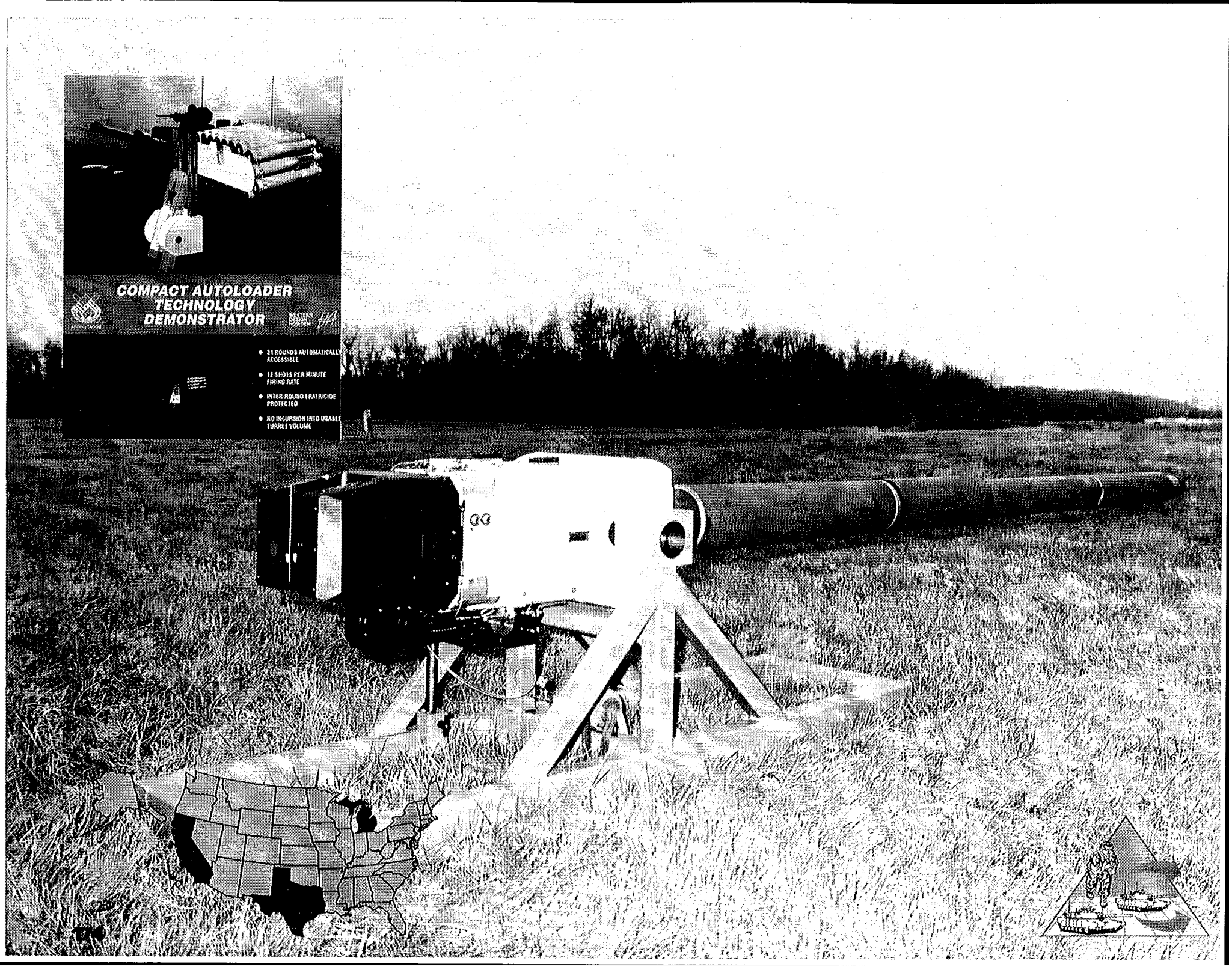
FOREIGN MILITARY SALES: Egypt - 555 M1A1 Kits; Kuwait - 218 M1A2s; Saudia Arabia - 315 M1A2s

PROGRAM STATUS: Production of new Abrams for the U.S. Army and current Foreign Military Sales cases is complete (except for M1A1 tanks kits for Egypt). In lieu of new production, the Army is upgrading approximately 1,000 older M1 tanks to the M1A2 configuration. A multiyear procurement for 600 M1A2 upgrades was awarded in July 96. Further M1A2 improvements, called the System Enhancement Program, (SEP), are underway to enhance the tanks digital command and control capabilities and to add second generation forward looking infrared sensors to the thermal sights to improve the tank's fightability and lethality.

PROJECTED ACTIVITIES: The initial M1A2 fielding to the First Cavalry Division, Ft. Hood, TX is underway with completion scheduled for 2QFY98. The first M1A2 SEP tanks are scheduled to begin fielding in 3QFY00.

PRIME CONTRACTOR: Allison Transmission (Indianapolis, IN)
General Dynamics (Land Systems Division) (Sterling Heights, MI; Warren, MI; Lima, OH;)
LITCO (Idaho Falls, ID)
Texas Instruments (Dallas, TX)

* See appendix for list of subcontractors.


COMPACT AUTOLOADER
TECHNOLOGY
DEMONSTRATOR
• 21 ROUNDS AUTOMATICALLY ACCESSIBLE
• 12 SHOTS PER MINUTE FIRING RATE
• ENTER ROUND FRATRICIDE PROTECTED
• NO INCURSION INTO USABLE TURRET VOLUME

Advanced Tank Armament System (ATAS)

MISSION: The Advanced Tank Armament System (ATAS) Program provides next generation armament system technologies for application to the M1 Abrams production main battle tank. These technologies are designed to increase the lethality and accuracy of the Abrams tank system at extended ranges while also reducing target engagement times. They allow the tank crew to engage enemy targets further, faster and more accurately than currently fielded systems.

CHARACTERISTICS: ATAS provides three main improvements to the Abrams tank - a long barrel, 120 mm XM291 cannon, a compact 120 mm autoloader, and extended range fire control system improvements. The long barrel XM291 cannon gives all current Abrams tank ammunition the ability to kill enemy targets one kilometer further out in range than is currently possible. This is due to the higher muzzle velocity generated by the XM291 gun at shot exit. This translates into greater penetration, range and killing power for the tank. The magazine of the compact 120 mm automatic ammunition loader (autoloader) fits into the existing Abrams tank bustle ammunition storage area, operates at a sustained 12 rounds per minute firing rate, and provides inter-round fratricide protection. Automatic target detection and tracking software decrease the time necessary for the tank crew to acquire and engage enemy targets. Tank firing accuracy is greatly enhanced by the addition of a continuous muzzle reference system, advanced fire control solutions, state of the art lead predictors and improved gun servos and actuators. Together, these improvements allow the tank crew to quickly and accurately kill enemy targets at extended ranges.

FOREIGN COUNTERPART: Several countries in the world include ATAS components in their tank fleets. The French LeClerc has a long barrel 120 mm cannon and autoloader. Russian T72 and T80 series tanks all have autoloaders. Finally, the Israeli Merkeva tank uses auto target trackers to improve gun accuracy.

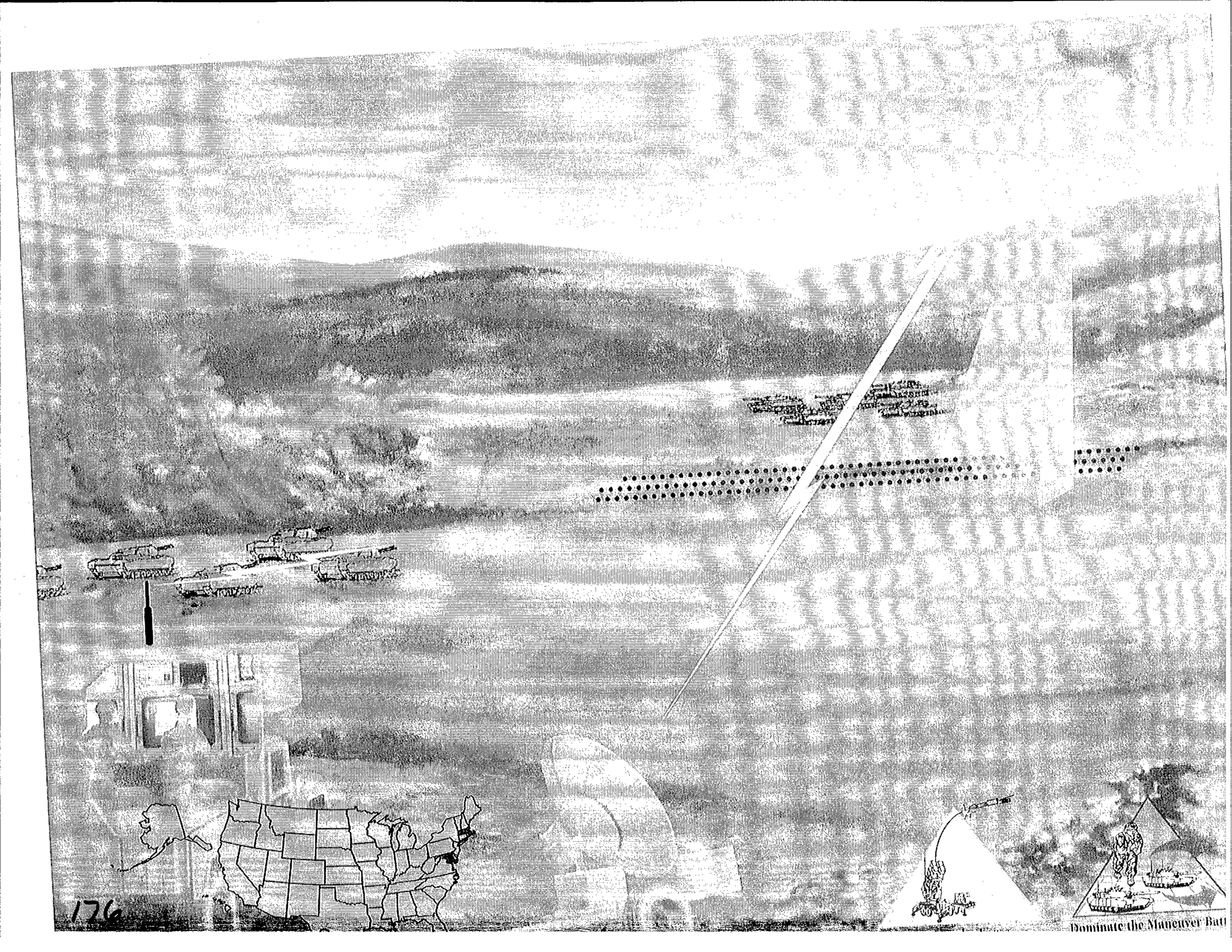
FOREIGN MILITARY SALES: The US continues to be involved in the Quadripartite Future Tank Main Armament agreement between the US, Germany, France and the United Kingdom. The goal of this agreement is to develop a common large caliber cannon and bullet.

PROGRAM STATUS: ATAS is a two phased program that is on track through FY03. Phase I will conclude with the testing of a Bradley Fighting Vehicle Autotracker on an M1A2 in FY97. Phase two involves the integration and testing of advanced fire control components in an M1A2 System Enhancement Program tank in FY98. The XM291 and autoloader will be added to this demonstrator and tested in FY99. This will be followed by Engineering and Manufacturing development of the XM291 gun leading to its type classification in FY03.

PROJECTED ACTIVITIES: Testing of an M1A2 with Auto Target Tracker in FY97.

PRIME CONTRACTOR:

Vehicle Integration:	General Dynamics (Land Systems) (Sterling Heights, MI)
Firecontrol System:	Texas Instruments (Plano, TX)
Autoloader:	Western Howen Design (Irvine, CA)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Dominate the Maneuver Batt

Airborne Standoff Minefield Detection System (ASTAMIDS)

MISSION: The Airborne Standoff Minefield Detection System (ASTAMIDS) provides a near real time stand-off minefield detection and survey system that can be employed in all conflict levels of air land operations.

CHARACTERISTICS: ASTAMIDS consists of an imaging sensor mounted on an Unmanned Aerial Vehicle (UAV) and a processor/algorithm integrated into the UAV Ground Control Station (GCS). The sensor will be controlled by the UAV GCS, transmitting minefield imagery to the GCS, and then processed in near real time. Minefield data will be displayed and disseminated to using units similar to other Reconnaissance, Intelligence, Surveillance, and Target Acquisition data.

FOREIGN COUNTERPART: No known foreign counterparts.

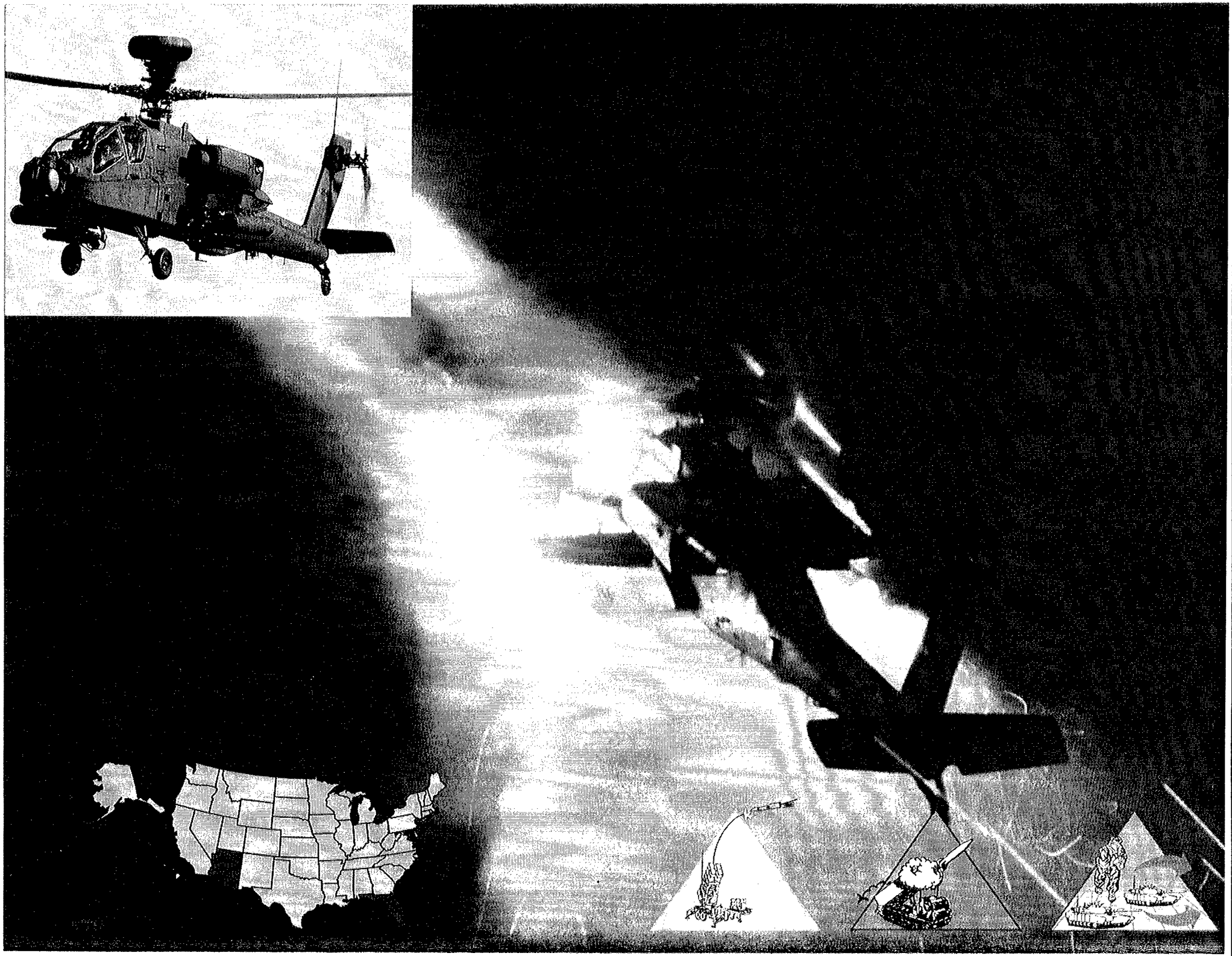
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The ASTAMIDS program is currently in the Demonstration and Validation phase of development. Milestone II is scheduled for 4QFY97; Milestone III is scheduled for 4QFY00.

PROJECTED ACTIVITIES: Technical Testing and Early User Test and Experimentation will be completed 3QFY97.

PRIME CONTRACTOR: Two competing systems with technical downselect at MSII:
Raytheon (Tewksbury, MA)
Westinghouse (Baltimore, MD)

* See appendix for list of subcontractors.



MISSION: The mission of the attack helicopter is to conduct rear, close, and deep operations; deep precision strike; and provide armed reconnaissance and security when required in day, night and adverse weather conditions.

CHARACTERISTICS: Longbow is a development and acquisition program for a millimeter wave radar air/ground targeting system capable of being used day, night, in adverse weather, and through battlefield obscurants. Longbow consists primarily of the integration of a mast-mounted millimeter wave fire control radar, a radar frequency interferometer, and a radar frequency fire-and-forget HELLFIRE missile onto the Apache. Longbow's digitized target acquisition system provides automated detection, location, classification, prioritization, and target handover. The AH-64D cockpit is redesigned to digitize and multiplex all systems. The MANPRINT crew stations have multifunction displays to reduce pilot work load and increase effectiveness. The modernized Apache heavy attack team now will be able to provide a truly "coordinated" rapid-fire (16 separate targets within 1 minute) capability to the maneuver force commander on a 24-hour basis in day, night, and adverse weather conditions.

FOREIGN COUNTERPART: No known foreign counterpart.

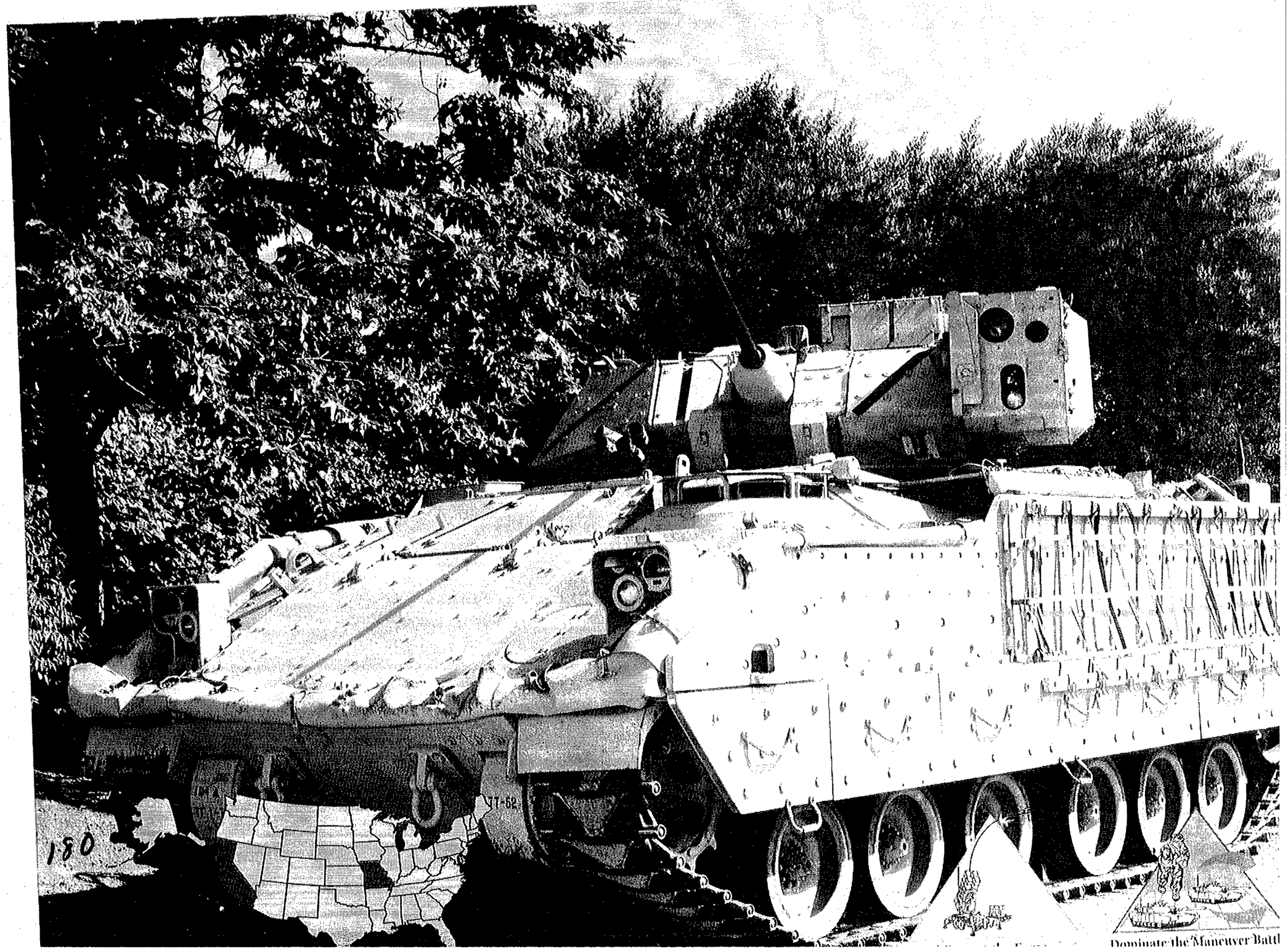
FOREIGN MILITARY SALES: Netherlands and United Kingdom

PROGRAM STATUS: The Apache Longbow System entered Full Scale Development in December 1990, following an extremely successful Proof of Principle (POP) phase. Technical success during POP culminated with the live firing of missiles against a wide variety of targets, moving and stationary, through smoke and obscurants. The initial Operational Test and Evaluation, conducted from January through March 1995, proved the Apache Longbow to be an operationally effective and suitable weapon system. As expected, the Apache Longbow (AH-64D) — with its capability to engage targets in weather and obscurant conditions which preclude the employment of laser-guided weapons — was far more effective in defeating threat armored vehicles and more survivable in the threat air defense environment than the AH64A. The Apache Longbow received Milestone III production approval in October 1995. Single year contracts for the airframe and fire control radar were awarded in December 1995 and March 1996 respectively. A five year multiyear contract for the airframe was signed on 16 August 1996. The current program objective calls for 227 Longbow fire control radar mission kits capable of being installed on the Apache's modernized fleet (758 minus attrition) being upgraded to the new AH-64D baseline configuration. The Apache Longbow will add significant warfighting capability to the combined arms team through increased survivability, lethality, and versatility, as well as through long-term reliability improvements.

PROJECTED ACTIVITIES: First production delivery: March 1997.
First Unit Equipped: July 1998.

PRIME CONTRACTOR: Joint Venture: Lockheed Martin (Orlando, FL) and Northrup Grumman (Baltimore, MD)
McDonnell Douglas (Mesa, AZ)

* See appendix for list of subcontractors.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MISSION: The Bradley Fire Support Team (BFIST) Vehicle provides an integrated Bradley-based fire support platform that allows company fire support teams and battalion/brigade fire support officers to plan, coordinate, execute, and direct timely, accurate indirect fires. Plans for BFIST production include both Bradley A2 Operation Desert Storm-based improvements and A3 variants.

CHARACTERISTICS:

Length:	30.96 ft
Width:	17.04 ft with armor tiles; 15.48 ft with armor skirts
Height:	14.04 ft
Weight:	60,000 lbs combat loaded
Power Train:	600 hp Cummins V093T diesel engine with GM-Allison HMPT-500-3 hydromechanical automatic transmission
Cruising Range:	250 mi
Road Speed:	38 mph
Crew:	4
Vehicle Armament:	25 mm Bushmaster cannon; 7.62 mm, M240C machine gun
Distribution:	Armor/Infantry Brigades-Battalions; Cavalry Regiments-Squadrons, Field Artillery Battalions
Current Models/Variants:	A3-based BFIST planned (XM7A1)

FOREIGN COUNTERPART: France: AMX-10 PAC-90, AMX VTT/LT; Russia: BMP PRP-3, BMP PRP-4; United Kingdom: MCV-80 Warrior MAOV; FV-432 AV

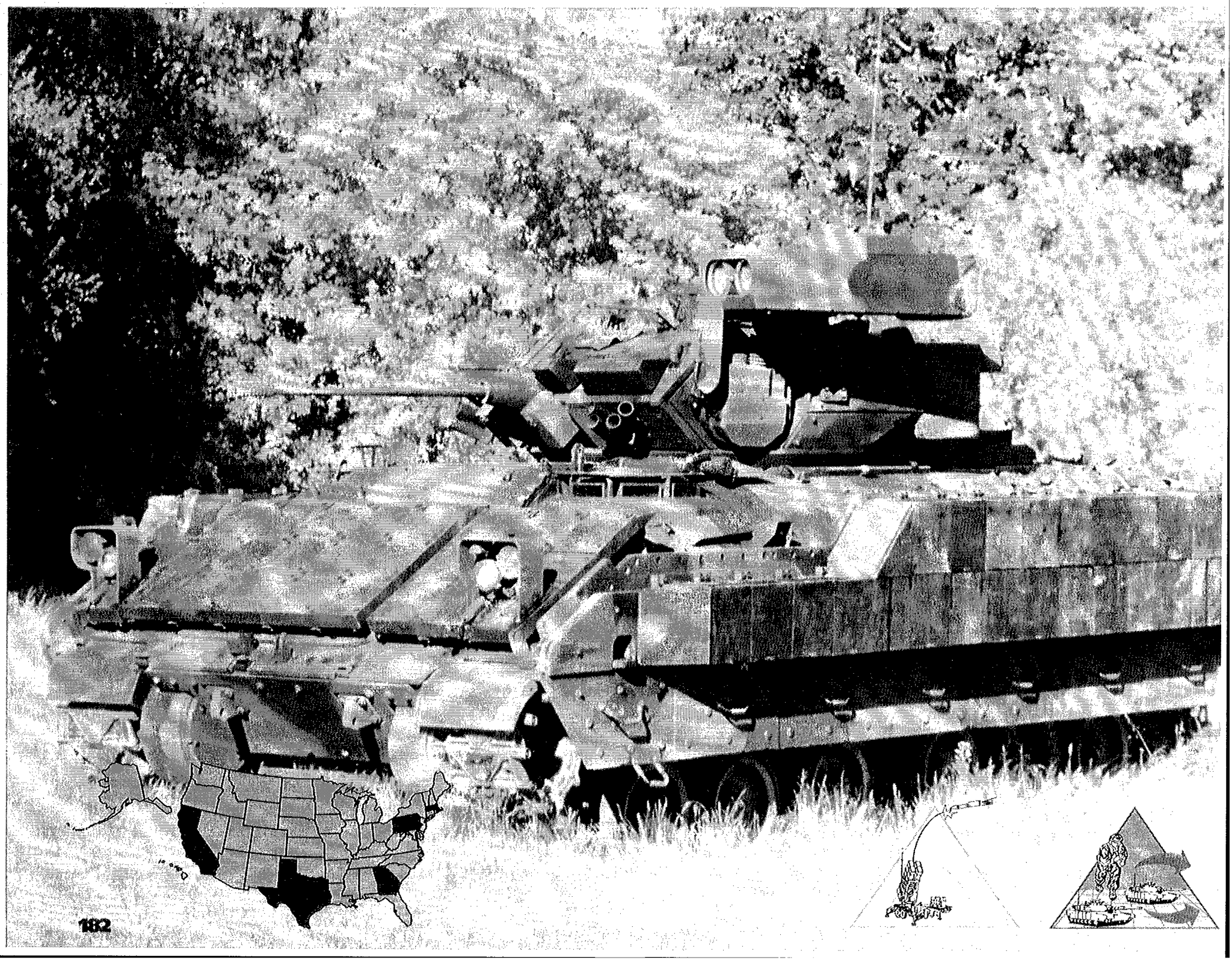
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: In FY96, the Bradley A2 Operation Desert Storm (ODS) BFIST (XM7) remained in engineering and manufacturing development. The Bradley Program Office conducted preliminary and critical design reviews for the A2 ODS BFIST were completed in 1QFY96 and 2QFY96 respectively. The first Bradley A2 ODS BFIST preproduction type was completed in 4QFY96.

PROJECTED ACTIVITIES: In FY97, the XM7 preproduction prototype will undergo contractor and government production qualification testing. A Low Rate Initial Production decision is expected in 4QFY97.

PRIME CONTRACTOR: FMC (United Defense, LP) (San Jose, CA)

* See appendix for list of subcontractors.



Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)

MISSION: The Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV) provides infantry and cavalry fighting vehicles with digital command and control capabilities, significantly increased situational awareness, enhanced lethality and survivability, and improved sustainability and supportability.

CHARACTERISTICS:

Length:	30.96 ft
Width:	17.04 ft with armor tiles; 15.48 ft with armor skirts
Height:	14.04 ft
Weight:	67,000 lbs combat loaded
Power Train:	600 hp Cummins V093T diesel engine with GM-Allison HMPT-500-3 hydromechanical automatic transmission
Cruising Range:	250 mi
Road Speed:	38 mph
Crew:	9 (3 on-board; 6 dismounts)
Vehicle Armament:	25 mm Bushmaster cannon; TOW II missile system; 7.62 mm, M240C machine gun
Distribution:	Armor/Infantry Brigades; Cavalry Regiments, Division Cavalry Squadron
Current Models/Variants:	Bradley M2/M3A0, A1, A2, A2ODS (Operation Desert Storm) IFV/CFVs, Bradley Fire Support Team (BFIST) Vehicle, Bradley Stinger Fighting Vehicle (BSFV)

FOREIGN COUNTERPART: China: Type 90, WZ-503; France: AMX-10P, AMX VCI; Germany: Marder 1; Russia: BMP 1, 2, & 3; United Kingdom: MCV-80 Warrior, FV-432

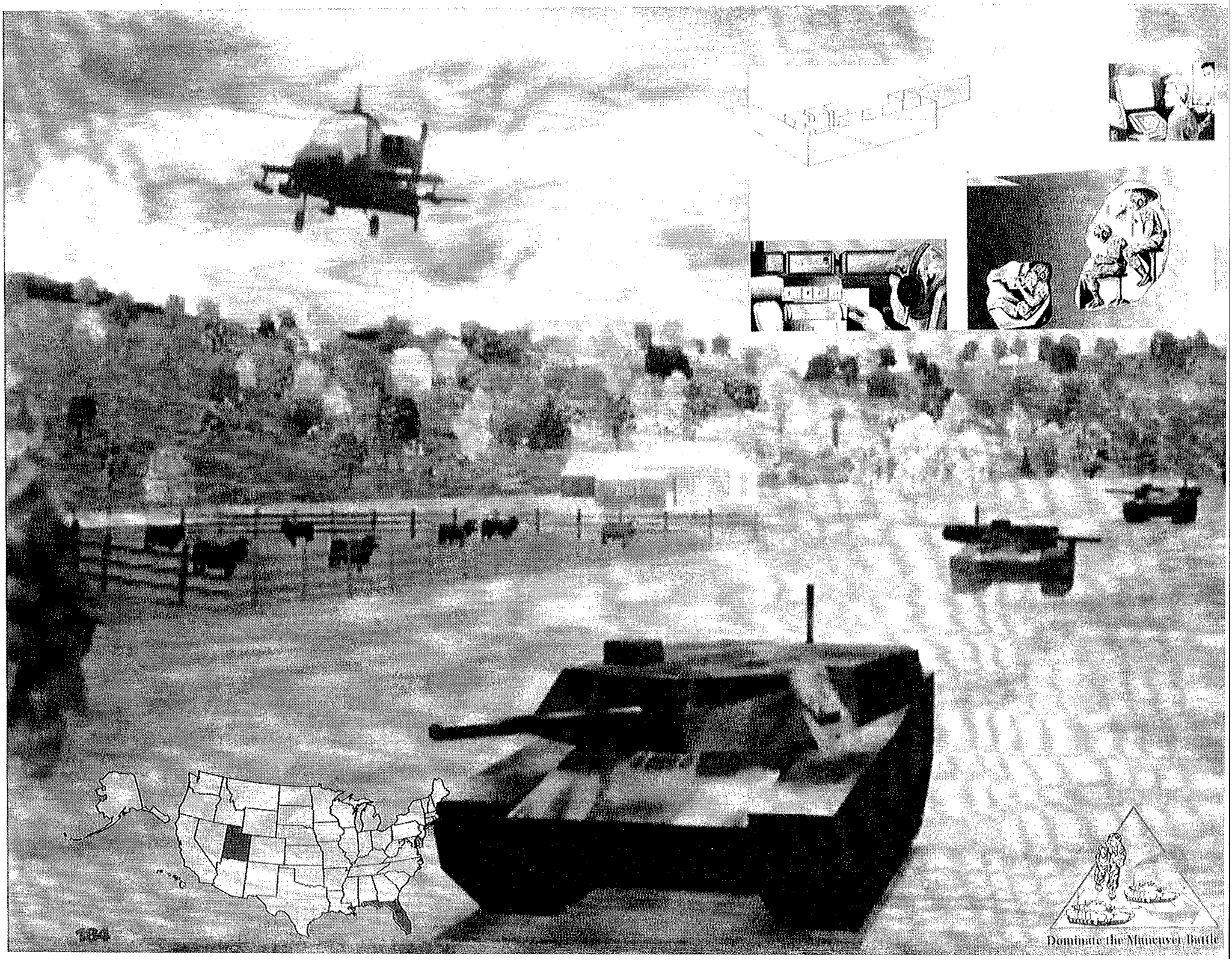
FOREIGN MILITARY SALES: Saudi Arabia (Bradley A2)

PROGRAM STATUS: In FY96, the Bradley Program Office will complete upgrade of selected Bradley AOs to the A2 configuration, continue upgrade of Bradley A1s to the A2 configuration, and begin conversion and fielding of selected Bradley A2s to the A2 Operation Desert Storm (ODS) configuration (first unit equipped in 1QFY97). The Bradley A3 remains in engineering and manufacturing development. The first Bradley A3 preproduction prototype was completed in 4QFY96.

PROJECTED ACTIVITIES: In FY97, Bradley A3 preproduction prototypes will undergo contractor and government production qualification testing and take part in initial limited user testing. A Low Rate Initial Production (LRIP) decision is expected in 2QFY97 with LRIP beginning in 3QFY97.

PRIME CONTRACTOR: FMC (United Defense, LP) (San Jose, CA)

* See appendix for list of subcontractors.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Close Combat Tactical Trainer (CCTT)

MISSION: The Close Combat Tactical Trainer (CCTT) provides realistic individual and collective training for armor and mechanized vehicle crews on a simulated battlefield.

CHARACTERISTICS: The CCTT's function is to train active and reserve component M1 Tank and M2/3 Bradley crews on mission training plan-based collective (crew through battalion task force) tasks and skills in command, control, communications, and maneuver on a simulated, fully interactive, real-time battlefield. The CCTT will simulate, in real time, the conduct of combat operations in a realistic environment with an appropriate and challenging opposing force that will require realistic individual, crew, and staff actions, placing the stresses of combat on all participants. The CCTT is fully distributed interactive simulation (DIS) compliant and is capable of conducting joint/coalition combined arms training with other CCTT interoperable training systems. The system will allow individuals, crews, and units to operate in a simulated combat environment, reducing the impact of restrictions of weapon effects, safety, terrain limitations, and time, and will assist in overcoming the effects of crew turbulence and scarce resources.

The CCTT program comprises a group of fully interactive networked simulators and command, control, and communications workstations, replicating the M1 and M2/3 vehicles and weapon systems of a company/team operating on a simulated real-time battlefield. The system will exist in both fixed-site and mobile versions. The fixed-site version will be static at all times during operation. The mobile version will be static during operation but will move over primary and secondary roads during transport from site to site. The mobile version is capable of deploying with the unit during contingency operations.

FOREIGN COUNTERPART: No known foreign counterparts.

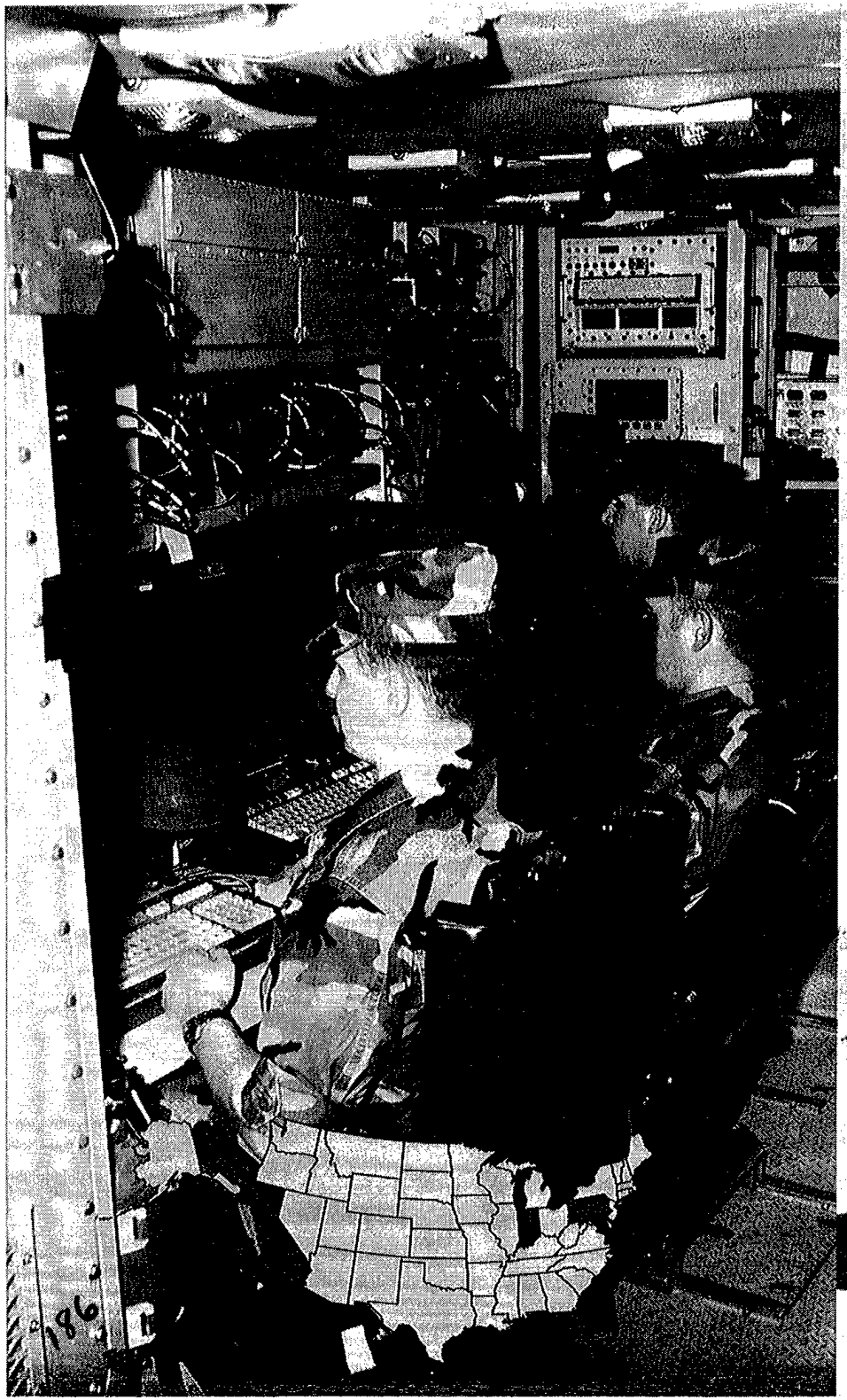
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The CCTT program successfully completed Milestone I/II ASARC. The contract was awarded in November 1992.

PROJECTED ACTIVITIES: Milestone III Procurement Decision.

PRIME CONTRACTOR: Lockheed-Martin (Orlando, FL)

* See appendix for list of subcontractors.



Win the Information War

Dominate the Maneuver Battle

MISSION: The Command and Control Vehicle (C2V) provides a highly mobile, survivable, and reconfigurable platform capable of hosting current and future command, control, communications, computer, and intelligence systems for operational planning use by battalion through corps battle staffs in heavy force operations.

CHARACTERISTICS:

Length:	35.4 ft
Width:	14.04 ft
Height:	12.72 ft
Weight:	56,000-66,000 lbs combat loaded
Power Train:	600 hp Cummins V093T diesel engine with GM-Allison HMPT-500-3EC hydromechanical
automatic	transmission
Cruising Range:	275 miles
Road Speed:	40 mph
Crew:	variable (maximum of 9)
Armament:	7.62mm, M240 series machine gun
Distribution:	Corps-Battalion
Models/Vars:	Platform for the Ground Based Common Sensor-Heavy, Armored Transport and Treatment Vehicle (planned)

FOREIGN COUNTERPART: China: Type 85 ACV, WZ-506, Type 90 CV; France: AMX-10PC, AMX VTT/PC; Germany: Tpz1 FuFu (Fuchs); Russia: BTR-50PU, MT-LBU, BMP-1 Kshm; United Kingdom: MCV-80 Warrior CV, FV-432C

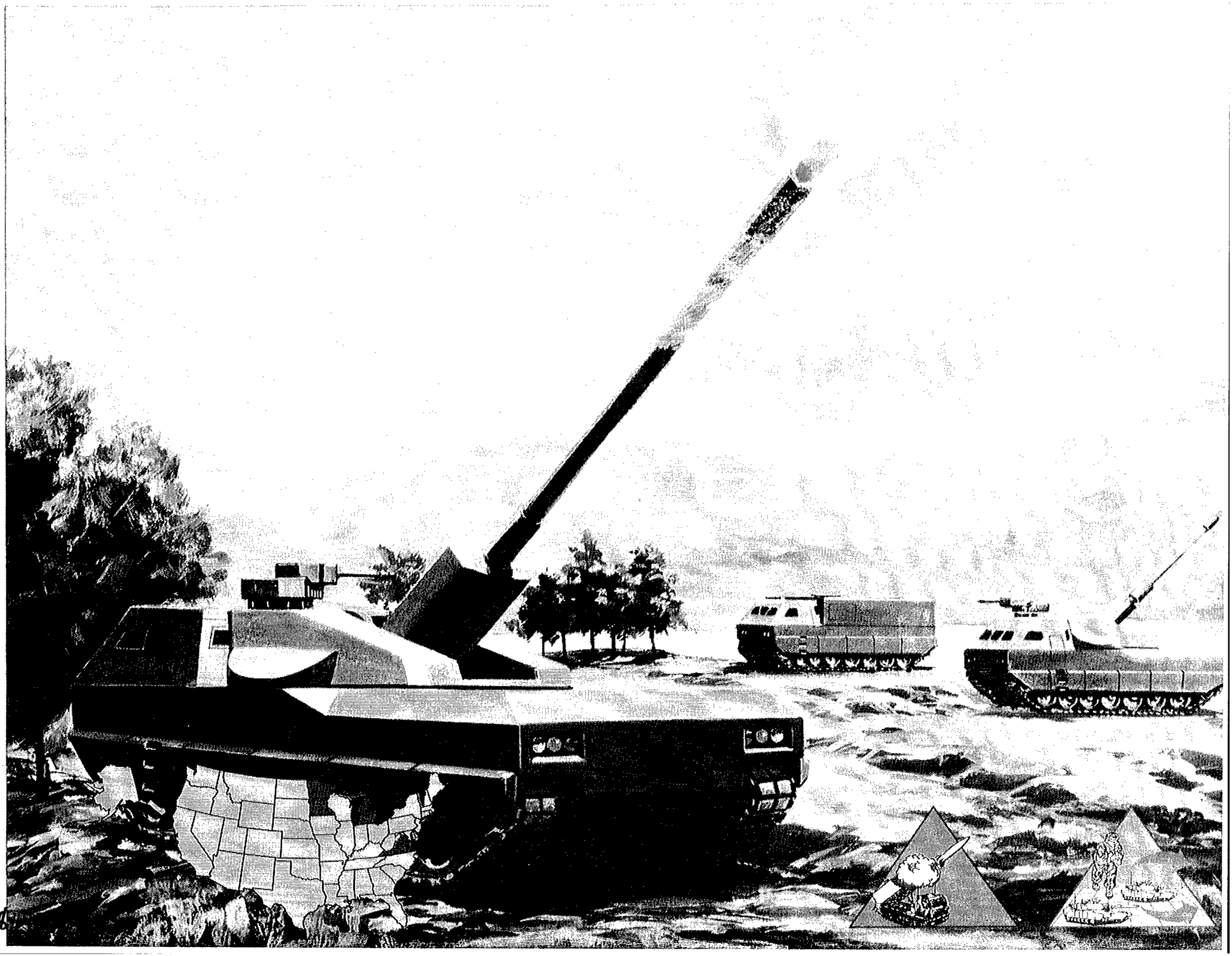
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: In FY96, the C2V remained in engineering and manufacturing development with the Bradley Program Office completing fabrication of four C2V preproduction prototypes. These vehicles are currently undergoing contractor and government production qualification testing. Early prototype C2Vs known as FCCVs and initial C2V preproduction prototypes were used during phased limited user testing (LUT); LUT was completed in 3QFY96. C2V was approved for Low Rate Initial Production (LRIP) in 4QFY96. C2V is scheduled to begin LRIP in 1QFY97.

PROJECTED ACTIVITIES: C2V will participate in the Task Force XXI and related Force XXI experiments.

PRIME CONTRACTOR: FMC (United Defense, LP) (San Jose, CA)

* See appendix for list of subcontractors.



MISSION: Crusader will be the indirect fire support "system of systems," providing direct and general support fires to maneuver forces on the future battlefield.

CHARACTERISTICS: The Self Propelled Howitzer (SPH) is a 155 mm self-propelled howitzer system that will provide a significant increase in artillery survivability, lethality, mobility, and operational capability and effectiveness through use and integration of advanced technology in its subsystems and combat components. The SPH will deliver unprecedented firepower capabilities at extended ranges. Some of the SPH critical technologies and capabilities include the XM297 inter mid wall cooled cannon, Modular Artillery Charge System (MACS), autosettable multioption fuze, automated ammunition-handling system, enhanced survivability, and improved mobility. The armored Resupply Vehicle (RSV) will provide the foundation for resupply of ammunition and fuel for the SPH. Inserting high-payoff technologies in robotics, automation, expert systems, vetronics, and improved ammunition propulsion into the resupply process, the RSV will provide the necessary ammunition to meet the expected firing rates; meet the goals for autonomous operations; and capitalize on cost and operational advantages of component commonality. RSV critical technologies and capabilities include a teleoperated docking arm, automated ammunition resupply system, automated fuel transfer system, and improved mobility. These systems, when fielded, will displace the M109A6 Paladin self-propelled howitzer and M992A2 field artillery ammunition supply vehicle in rapidly deployable and forward-deployed forces.

SPH		RSV	
Range:	40+ km (assisted)	Automated rearm:	12 rd/min
Rate of fire:	10-12 rd/min	Automated refuel:	132-190 L/min
Multiple round, simultaneous impact:	4 rd (1 SPH)	Range:	450 km
		Speed:	48 mph highway; 30 mph cross country
Ammo storage:	60 fuzed rd	Ammo storage:	130-200 fuzed rd
Crew:	3 (operable by 1)	Crew:	3

FOREIGN COUNTERPART: No known foreign counterpart.

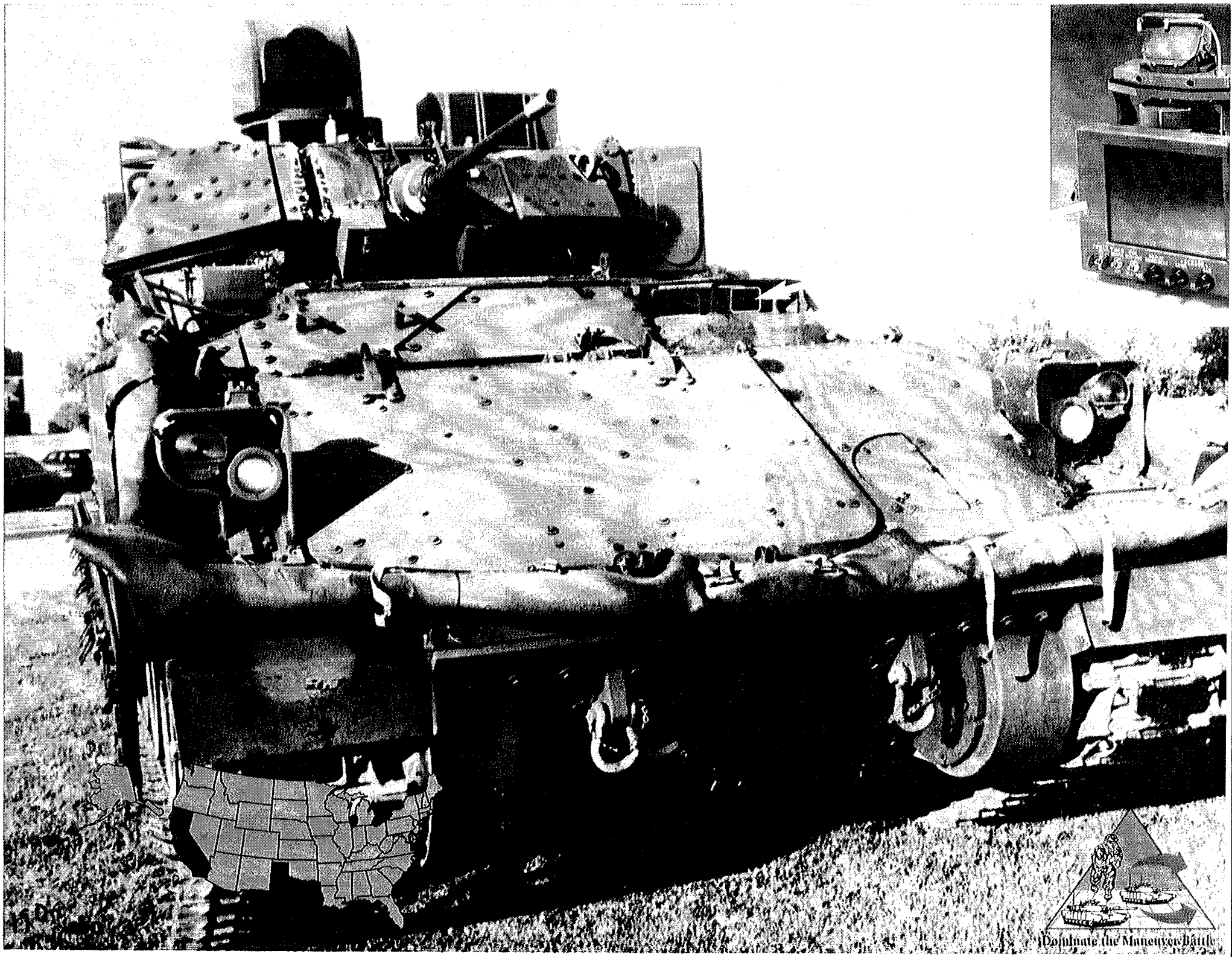
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: In 1992, the Army successfully demonstrated fuze and projectile compatibility and successfully demonstrated the firing of a multi-option Fuze for Artillery. In 1993/1994, the Army fabricated/assembled a hardstand cannon and autoloader which demonstrated 12 rounds per minute automated ammunition handling, azimuth and elevation slew rates, pointing accuracy and integrated technical and tactical fire control; fabricated and assembled an Automotive Test Rig with an LV100, 1500 horsepower engine, electric drive and self-cleaning air filter; fabricated and assembled a four-man reconfigurable crew module which demonstrated man machine interface, full audio, video and data collection capabilities; and demonstrated ammunition transfer rates of 12 rounds per minute. In 1996 the Army selected the XM296 and MACS as the armament system for Crusader. Currently, Crusader is in the Demonstration and Validation (DEM/VAL) phase of development.

PROJECTED ACTIVITIES: PEO, Field Artillery Systems/Commandant, FA School; in-process review scheduled for 3QFY97.

PRIME CONTRACTOR: FMC (United Defense, LP) (Minneapolis, MN)

* See appendix for list of subcontractors.


Dominate the Maneuver Battle

Driver's Vision Enhancer (DVE)

MISSION: The AN/VAS-5 Driver's Vision Enhancer (DVE) provides the drivers of combat and tactical wheeled vehicles unparalleled flexibility to continue day or night operations during periods of severely degraded visual conditions caused by smoke, fog, dust or similar conditions.

CHARACTERISTICS: This thermal viewing system increases vehicle mobility under very poor driving conditions. DVE's cost is also very low when compared to other FLIRs. The DVE provides mobility under the same conditions as the target engagement sensors providing a critical Go vs. No Go capability. DVE provides situational awareness, and ambush detection and vehicle tracking. For the first time, combat service support will be able to keep up with the Warfighter.

The DVE's sensor module consists of a second generation Forward Looking Infrared (FLIR). The output device consists of a high quality commercial flat-panel display and control module. The system is "Driver Friendly" and easy to use. DVE video imagery may also be distributed to other vehicle crew members. The DVE also contains a data port for linkage to the "digitized" battlefield.

The DVE can be easily adapted to any current or future US or NATO combat and tactical wheeled vehicle due to its "horizontal technology integration" features.

Bradley M2A2 ODS and M2A3
Abrams M1A2 and USMC M1A1
M58 Smoke Vehicle
Wolverine
Command & Control Vehicle
USMC Light Armored Vehicle
Grizzly
USMC Amphibious Assault Vehicle
Heavy Expanded Mobility Tactical Truck-HEMTT
High Mobility Multipurpose Wheeled Vehicle-HMMWV
Heavy Equipment Transporter System-HETS
Palletized Loading System - PLS
Family of Medium Tactical Vehicles - FMTV
Hercules
Paladin
USMC Armored Vehicle Launched Bridge

FOREIGN COUNTERPART: No known foreign counterpart.

FOREIGN MILITARY SALES: No foreign military sales. However, DVE has considerable potential as a Driver's Aid for NATO countries interested in Rationalization, Standardization and Integration.

PROGRAM STATUS: Limited procurement contract awarded 30 August 1995.

PROJECTED ACTIVITIES: Milestone III decision FY97.

PRIME CONTRACTOR: Texas Instruments (Dallas, TX)

*See appendix for list of subcontractors.


Protect the Force
Dominate the Maneuver Battle

MISSION: The Grizzly provides an in-stride capability to overcome simple and complex linear obstacles.

CHARACTERISTICS: The system will breach a full-width, clear lane to allow maneuver force mobility through minefields, rubble, tank ditches, wire, and other obstructions. The Army currently has no system with these capabilities. The Grizzly will be fielded in Division and selected Corps Engineer Battalions.

The Grizzly is an M1 Abrams chassis-based system equipped with a full-width mine clearing blade and a power-driven excavating arm. While buttoned up, the crew of two will be able to operate all systems. The vehicle contains electric drive, an advance open systems vehicle electronic architecture and provisions for digital battlefield command and control.

FOREIGN COUNTERPART: Germany: Pionierpanzer 2 Israel: MIKI Russia: IMR-2

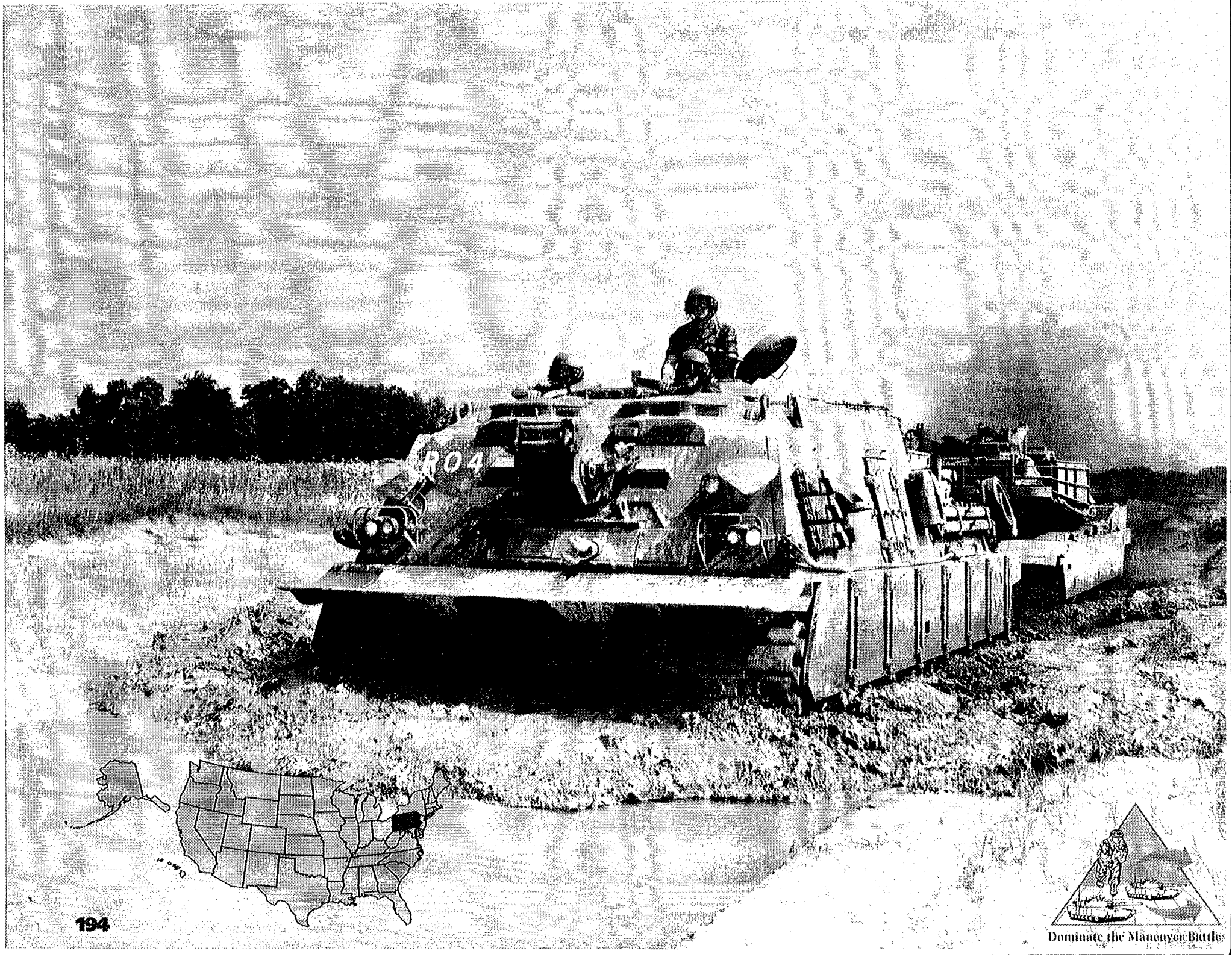
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The Breacher program was initiated in FY92 as a result of lessons reinforced during Operation Desert Storm. The Army leveraged the work conducted under an Advanced Technology Transition Demonstrator program. A sole-source contract was awarded to United Defense, LP (formerly BMY) in September 1992 for Demonstration and Validation. Prototypes were delivered in 4QFY95. Early User Experiments were conducted in February 1996, and the system prototypes are undergoing technical performance testing. Blade performance testing using Automatic Depth Control was completed in November 1996.

PROJECTED ACTIVITIES: Milestone II in FY97.

PRIME CONTRACTOR: FMC (United Defense, LP) (York, PA)

* See appendix for list of subcontractors.


R04

MISSION: The Hercules is a full-tracked, armored vehicle developed for towing, winching, and hoisting operations supporting battlefield recovery operations and evacuation of heavy tanks and other tracked combat vehicles.

CHARACTERISTICS: The Hercules will be type classified as the M88A2. The Hercules uses the existing M88A1 chassis but significantly improves towing, winching, lifting, and braking characteristics. The Hercules is the primary recovery support to the Abrams tank fleet, and future heavy systems such as the Breacher, Wolverine, and heavy self-propelled artillery.

Length:	339 in	Power train:	12 cylinder, 1,050 hp air-cooled diesel engine with 3-speed automatic transmission
Width:	144 in		
Height:	123 in	Cruising range:	200 mi
Weight:	70 ton	Draw bar pull:	70 ton
Speed (w/o load):	29 mph	Boom capacity:	35 ton
(w/load):	20 mph	Winch Capacity:	70 ton / 300 ft
Armament:	One .50 caliber machine gun	Aux. Winch Capacity:	3 ton / 670 ft

FOREIGN COUNTERPART: There is no foreign counterpart that provides the combined weight, towing, winch, and hoist capacities developed in the Hercules. However, many foreign nations do incorporate recovery systems on existing recovery chassis or main battle tank chassis.

FOREIGN MILITARY SALES: Kuwait (1994)

PROGRAM STATUS: The Hercules is undergoing low rate initial production testing that includes 9,000 miles of RAM, performance and user evaluations. Initial fielding is planned for early FY97. PQT/IOTE was conducted 2–4QFY96.

PROJECTED ACTIVITIES: Milestone III is scheduled for 1QFY97.
First Unit Equipped is scheduled for 2QFY97.

PRIME CONTRACTOR: FMC (United Defense, LP) (York, PA)

* See appendix for list of subcontractors.


1976
Dominate the Maneuver Batt

MISSION: The mission of the Hornet is to counter the enemy's mobility. It will delay, disrupt and canalize enemy vehicle movement in the close battle. Hornet is planned for immediate use today with early entry forces such as the 82nd Airborne. It will provide survivability for small isolated forces to minimize casualties and protect against armored vehicle attacks.

CHARACTERISTICS: The Hornet is the Army's first generation of a smart, autonomous top attack munition. It employs seismic and acoustic sensors to detect, classify and track a target. Once the target is validated by internal control electronics and within the 100 meter lethal radius, the munition determines the optimum firing point and launches a smart submunition over the target. The sublet acquires the target by infrared sensor and fires a tantalum Explosively Formed Penetrator (EFP) at the top of the target vehicle.

FOREIGN COUNTERPARTS: No known foreign counterpart.

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The Hornet is currently in Low Rate Production. The Hornet Product Improvement Program (PIP) is currently in EMD.

PROJECTED ACTIVITIES: Basic Hornet type classification is scheduled for 4QFY97. Hornet PIP type classification is scheduled for 4QFY99

PRIME CONTRACTOR: Textron (Wilmington, MA)

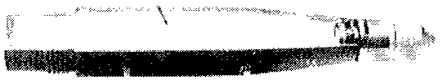
* See appendix for list of subcontractors.

HYDRA 70 ROCKET SYSTEM FAMILY

M267 PRACTICE MPSM

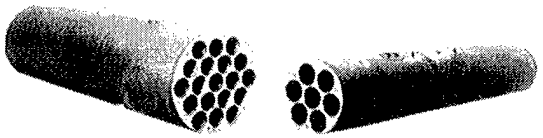
M261 MPSM

M274 SIGNATURE PRACTICE

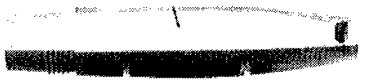


M151 HE/PD

ATAF, FLECHETTE

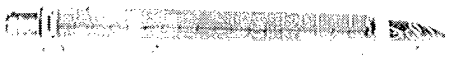


LWL

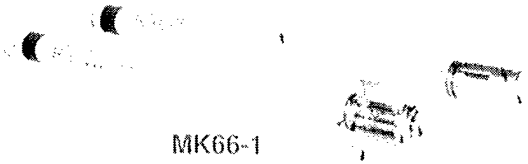


M151, WITHOUT FUZE

M257 ILLUMINATION

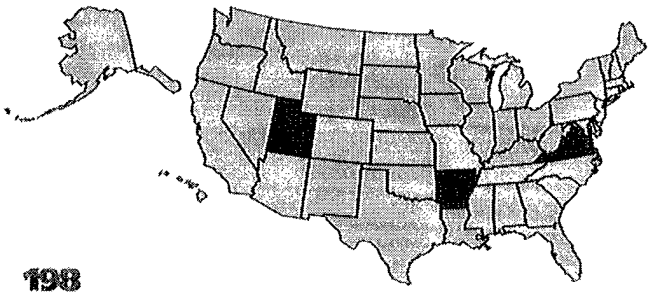


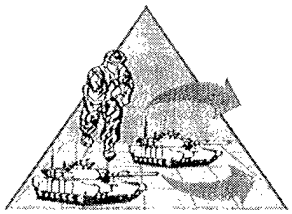
M264 SMOKE



MK66-1

M151 HE/RS





MISSION: The family of HYDRA 70 rockets performs a variety of functions. The war reserve unitary and cargo warheads are used for anti-materiel, anti-personnel, and suppression missions. The family of rockets also includes smoke screening, illumination, and training warheads. HYDRA rockets are fired from Apache, Cobra, and Kiowa Warrior helicopters by the Army and are used from other platforms by Special Operations Forces, the Marine Corps, the Navy, and the Air Force.

CHARACTERISTICS: The warheads fall into three categories:
(1) Unitary warheads with impact-detonating fuzes or remote-set multioption fuzes
(2) Cargo warheads with airburst-range, setable fuzes using the "wall-in-space" concept or fixed standoff fuzes
(3) Training rounds

FOREIGN COUNTERPARTS: Although there is no known foreign counterpart, many countries have expressed an interest in coproduction of this system.

FOREIGN MILITARY SALES: Bahrain, Colombia, Egypt, Greece, Japan, Jordan, Korea, Kuwait, Netherlands, Pakistan, Saudi Arabia, Taiwan, Thailand, Tunisia, United Arab Emirates

PROGRAM STATUS: New award in 1QFY96. Production continuing through FY96.

PROJECTED ACTIVITIES: Performance Specification Contract Award in 2QFY97.

PRIME CONTRACTOR: Lockheed Martin (Camden, AR)

* See appendix for list of subcontractors.

MISSION: Javelin provides a man-portable, medium anti-tank capability to the infantry, scouts, and combat engineers.

CHARACTERISTICS: Javelin is a man-portable, anti-tank system developed for the U.S. Army and U.S. Marine Corps. The system is highly lethal against tanks with conventional and reactive armor. Javelin comprises two major tactical components: a reusable Command Launch Unit (CLU) and a missile sealed in a disposable Launch Tube Assembly. The CLU incorporates an integrated day/night sight and provides target engagement capability in adverse weather and countermeasure environments. The CLU may also be used in the stand-alone mode for battlefield surveillance and target detection.

The Javelin system weighs less than 49.5 lb and has a maximum range in excess of 2,000 m. Javelin's key technical feature is the use of fire-and-forget technology which allows the gunner to fire and immediately take cover. Additional special features are the top attack and/or direct fire modes (for targets under cover), integrated day/night sight, advanced tandem warhead, imaging infrared seeker, target lock-on before launch, and soft launch (the Javelin can be fired safely from enclosures and covered fighting positions). Javelin replaces the Dragon.

FOREIGN COUNTERPART: Although not yet in production, the Israeli Spike and Gil are being promoted as having fire-and-forget capability. Other medium range systems currently fielded, or in development, include the Russian AT-7, the Swedish BOFORS BILL, the French MILAN 2T and the Euro Missile TRIGAT.

FOREIGN MILITARY SALES: Recent approval of the Javelin export version opens the door for Foreign Military Sales. Production capacity is expected to be available for foreign customers in FY98.

PROGRAM STATUS: After a 54-month Engineering and Manufacturing Development phase, the Javelin went into Low Rate Initial Production (LRIP) in FY94. Fielding of the system began in June 1996.

PROJECTED ACTIVITIES: The system will have a Milestone III full rate production decision in April 1997. A three year multiyear full rate production contract is planned for May 1997.

PRIME CONTRACTOR: Joint Venture: Texas Instruments/Lockheed Martin (Orlando, FL)
Lockheed Martin (Orlando, FL)
Texas Instruments (Lewisville, TX)

* See appendix for list of subcontractors.

MISSION: The Kiowa Warrior fills the armed reconnaissance role for attack helicopter and air cavalry units.

CHARACTERISTICS: The Kiowa Warrior currently is the only practical armed reconnaissance aircraft in the Army inventory until RAH-66 fielding begins early in the next decade. The OH-58D performs reconnaissance, security, command and control, target acquisition/designation, and defensive air combat missions. The Kiowa Warrior adds armed reconnaissance, light attack, and Multipurpose Light Helicopter (MPLH = rapid deployment, troop lift, cargo, and casualty evacuation) to the basic OH-58D Kiowa mission capabilities. The OH-58D has a Mast-Mounted Sight that houses a Thermal-Imaging System, Low-Light Television, and a Laser Rangefinder/Designator. A highly accurate navigation system permits precise target location that can be handed off to other engagement systems via the Airborne Target Handover System. The Laser Designator can provide autonomous designation for the laser HELLFIRE or remote designation for other laser-guided precision weapons. Air-to-Air Stinger (ATAS) provides security against threat aircraft. The armed retrofit program began in FY91 and provides air-to-ground weapons and other improvements to previously produced OH-58Ds.

Max gross weight:	5,500 lb
Max speed:	118 kt—clean; 113 kt—armed
Crew:	2
Armament:	ATAS, (2 round launcher) .50 caliber machine gun, HYDRA 70 (2.75 in) rockets (7-shot pod), HELLFIRE missiles (2 round launcher). Choice of one system per side.

FOREIGN COUNTERPART:

France:	Gazelle, Alloutte
Germany:	BO-105
Russia:	HINDs, HIPs, Hoplites

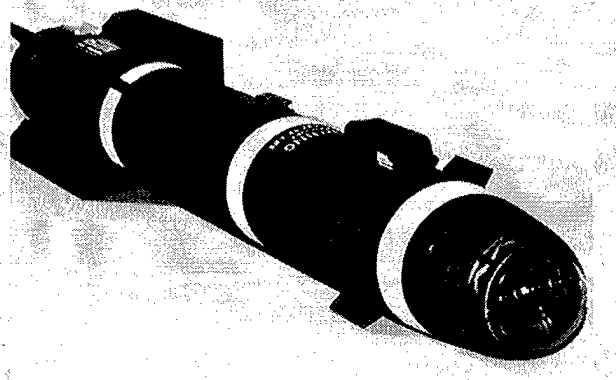
FOREIGN MILITARY SALES: Taiwan: 26 Kiowa Warriors. Deliveries complete.

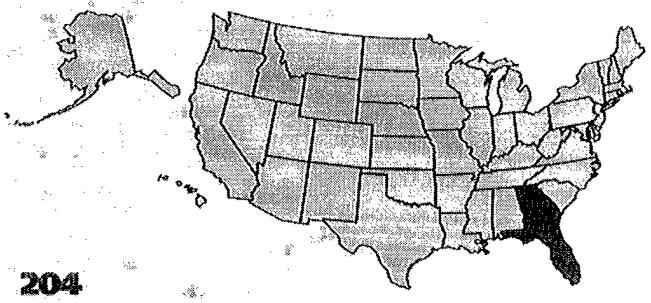
PROGRAM STATUS: The OH-58D is in the 13th year of production. AHIPs began retrofit/remanufacture in FY93 for the Armed Kiowa Warrior version. There have been 267 aircraft fielded through September 1996. Aircraft deployments include the training bases at Fort Rucker and Fort Eustis, and operational units in CONUS, USAREUR, and Korea. The Procurement Objective is currently 398, with a total Army requirement of 507 aircraft. Deliveries of current contracts will end in September 1998.

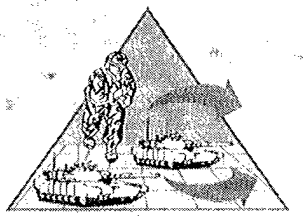
PROJECTED ACTIVITIES: 22 Kiowa Warriors are in the manufacturing process.

PRIME CONTRACTORS: Allison Engines (Indianapolis, IN)
Honeywell (Albuquerque, NM)
McDonnell Douglas (Montovia, CA)
Textron Inc. (Bell Helicopter) (Fort Worth, TX)

* See appendix for list of subcontractors.







MISSION: Laser Hellfire provides a heavy anti-armor and surgical strike capability for attack helicopters.

CHARACTERISTICS: Laser Hellfire is used as the main armament of the U.S. Army's AH-64 Apache and the U.S. Marine Corps' AH-1W Super Cobra attack helicopters. It is also used on the OH-58D Kiowa Warrior helicopter. The laser missile homes on a laser spot that can be projected from ground observers, other aircraft, or the launching aircraft itself. This enables the system to be employed in a variety of modes; autonomous, air or ground, direct or indirect, single shot, rapid, or ripple fire.

There are three versions of the Laser Hellfire missile in various stages of the life cycle:
Basic Hellfire: Semi-active laser seeker missile system.
Interim Hellfire: Similar to basic Hellfire but adds a precursor warhead to defeat reactive armor.
Hellfire II: This missile incorporates many improvements over the previous models of Hellfire, including laser obscurant/backscatter improvements. Other improvements include electro-optical countermeasures, hardening, improved target reacquisition capability, an advanced warhead capable of defeating all projected armor threats into the 21st century, reprogrammability to adapt to changing threats and mission requirement, shipboard compatibility, and regaining the original Hellfire missile weight and length.

Version:	Basic	Interim	HF II
Diameter:	7 in	7 in	7 in
Weight:	100 lb	107 lb	100 lb
Length:	64 in	71 in	64 in

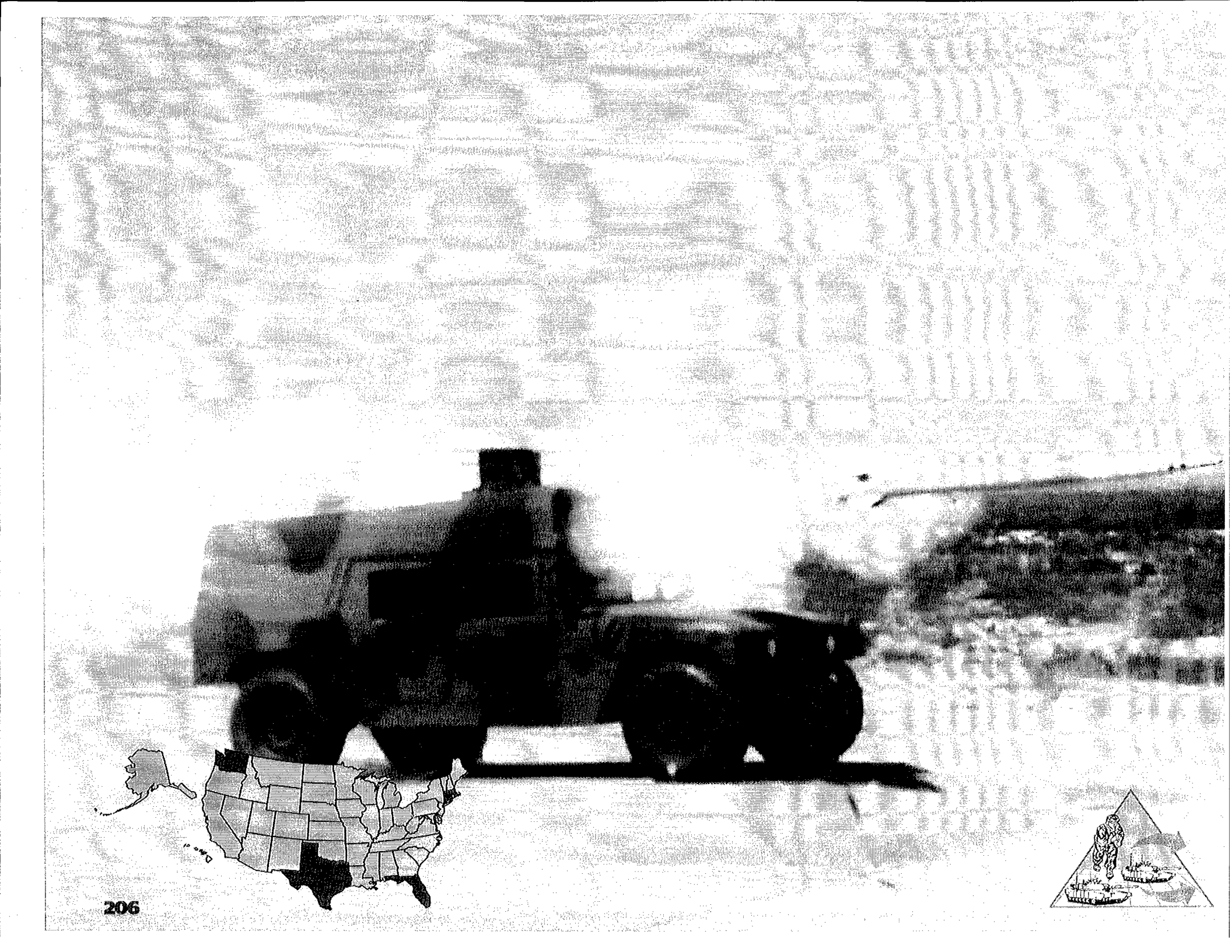
FOREIGN COUNTERPART: Numerous countries have one or more wire, radio, or laser homing anti-armor missiles of varying accuracy and lethality.

FOREIGN MILITARY SALES: Egypt, Greece, Israel, Netherlands (direct sale), Saudi Arabia, Sweden, Taiwan, United Arab Emirates, United Kingdom (direct sale).

PROGRAM STATUS: There are three versions of the Laser HELLFIRE missile in various stages of the life cycle:
Basic HELLFIRE: Semi-active laser seeker, 31,616 produced by both Lockheed Martin and Rockwell International since 1982. All deliveries have been completed.
Interim HELLFIRE: Final deliveries were completed in January 1994, with 8,807 missiles produced for the U.S. Army.
HELLFIRE II: Deliveries began in March 1995.

PROJECTED ACTIVITIES: Final production buy in FY97 for 1,800 missiles. Deliveries of HELLFIRE II will continue through 1999.

PRIME CONTRACTOR: Hellfire Systems Limited Liability Company (Lockheed Martin, Orlando, FL and Rockwell International, Duluth, GA).



Line-of-Sight Anti-Tank (LOSAT)

MISSION: The Line-of-Sight Anti-Tank (LOSAT) will provide a high volume of extremely lethal, accurate missile fire, effective against heavy armor systems at ranges exceeding tank main gun ranges.

CHARACTERISTICS: The LOSAT weapon system consists of kinetic energy missiles (KEM) and a second generation forward looking infrared (FLIR)/TV acquisition sensor mounted on an air mobile Heavy High Mobility Mult-Purpose Wheeled Vehicle (HMMWV) combat vehicle chassis in order to help remedy the early entry force lethality shortfall against heavy armor. The key attractions of the LOSAT are the tremendous overmatch lethality of the KEM (defeats all predicted future armored combat vehicles) and its deployability, which is compatible with the early entry forces. The LOSAT also will provide increased survivability and countermeasure effectiveness. The LOSAT will operate out to the maximum range of direct fire combat engagements and will provide dramatically increased rates of fire and enhanced performance under day and night, adverse weather, and obscured battlefield conditions. The current program provides for the conduct of a demonstration of the HMMWV platform and will involve flight tests and early soldier evaluations of the system. The demonstration program is a cost-effective means to assess the utility of LOSAT to the early entry force as part of the rapid force projection initiative (RFPI). This project will develop improved technologies for KE missile defeat of robust armor targets and evaluate integration of the LOSAT capability into an air mobile configuration. Project objectives are to position the technology for future acquisition decisions, demonstrate subsystem capabilities in flight tests and dirty battlefield environment, evaluate the utility for the LOSAT technology for the early forces, demonstrate an integrated HMMWV-based LOSAT system in flight test and advanced warfighting experiments, and evaluate affordability issues.

KEM

Weight:	177 lb	Length:	112 in
Diameter:	6.4 in	Range:	Greater than TOW
Crew:	2		

FOREIGN COUNTERPART: No know foreign counterparts.

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The LOSAT program began a Technology Demonstration phase of development in 4QFY92. The demonstration has completed priority risk reduction tasks to the fire control system (FCS), the demonstration of the FCS upgrades in dirty battlefield and flight tests. The early entry force (EEF) demonstration includes the design, fabrication, and integration of a LOSAT system into a heavy HMMWV chassis, a missile flight test program from the HMMWV-based LOSAT fire unit, and advanced warfighting experiments (AWE) user testing.

PROJECTED ACTIVITIES: Perform system engineering requirements analyses for application of the LOSAT system on the HMMWV configuration. Conduct technical analyses to establish system error, power, weight, space and timing budgets for the HMMWV configuration. Establish chassis and crew environment during missile firings including noise, pressure, recoil, exhaust products, and temperature. Update the LOSAT system simulation for change associated with the HMMWV configuration. Support distributed interactive simulation crew station simulation (DISCSS) related to RFPI analysis simulation effort and in anti-armor advanced technology demonstration (A2ATD) experiments.

PRIME CONTRACTOR: Lockheed Martin Vought Systems (Dallas, TX)

*See appendix for list of subcontractors.

MISSION: Longbow HELLFIRE will provide an adverse weather, fire-and-forget, heavy anti-armor capability for the Army's AH-64D Longbow Apache attack helicopter.

CHARACTERISTICS: Longbow HELLFIRE is a fire-and-forget version of the HELLFIRE missile. The Longbow program also includes development of a mast-mounted Fire Control Radar (FCR) and numerous modifications to the Apache helicopter. The Longbow FCR will locate, classify, and prioritize targets for the Longbow HELLFIRE missile. The Longbow system is being developed for integration onto the Apache and Comanche helicopters. Longbow HELLFIRE incorporates a millimeter wave radar seeker on a HELLFIRE II aft section bus. The primary advantages of the Longbow missile include adverse weather capability (rain, snow, fog, smoke, and battlefield obscurants); millimeter wave countermeasures survivability; fire-and-forget guidance, which allows the Apache to launch and then immediately remask, thus minimizing exposure to enemy fire; an advanced warhead capable of defeating all projected armor threats into the 21st century; and reprogrammability to adapt to changing threats and mission requirements. The combination of Longbow HELLFIRE's fire-and-forget capability and HELLFIRE II's precision guidance will provide the battlefield commander with flexibility across a wide range of mission scenarios, permitting fast battlefield response and high mobility not afforded by other anti-armor weapons.

Diameter:	7 in
Weight:	108 lb
Length:	68 in

FOREIGN COUNTERPART: No known foreign counterpart.

FOREIGN MILITARY SALES: United Kingdom (direct commercial sale).

PROGRAM STATUS: Longbow Hellfire entered production on 13 October 1995 with the successful completion of the Milestone III Defense Acquisition Board. The first low-rate initial production (LRIP) contract was awarded in December 1995 for 352 missiles.

PROJECTED ACTIVITIES: The second LRIP contract is scheduled for award in FY97. First Unit Equipped (FUE) in July 1998.

PRIME CONTRACTOR: Longbow Hellfire Limited Liability Company (Lockheed Martin, Orlando, FL and Northrop Grumman, Los Angeles, CA).


Protect the Force
Dominate the Maneuver Battl

MISSION: The M113 Family of Vehicles (FOV) provides a highly mobile, survivable, and reliable tracked vehicle platform that is able to maintain pace with Abrams and Bradley-equipped units and is adaptable to a wide range of current and future battlefield tasks through the integration of specialized mission modules.

CHARACTERISTICS:

	M113A3
Length:	17.4 ft
Width:	8.8 ft with side skirts
Height:	6.7 ft
Weight:	27,150 lbs combat loaded
Power Train:	275 hp, 6V53T Detroit Diesel engine with Allison X200-4A hydrokinetic, automatic transmission
Cruising Range:	300 mi
Road Speed:	41 mph
Crew:	variable (maximum of 13)
Armament:	50 caliber, M2A2 heavy machine gun
Distribution:	Corps-Company
Current Models:	M58 Smoke Generator Carrier, M548 Cargo Carrier, M577 Command Post Carrier, M901 Improved TOW Vehicle, M981 Fire Support Team Vehicle, M1059 Smoke Generator Carrier, M1064 Mortar Carrier, M1068 Standard Integrated Command Post System Carrier, OPFOR Surrogate Vehicle

FOREIGN COUNTERPART: China: Type 577, Type YW-534; France: AMX VCI; Russia: BTR-50P, MTLB; United Kingdom: FV-432, FV-4333

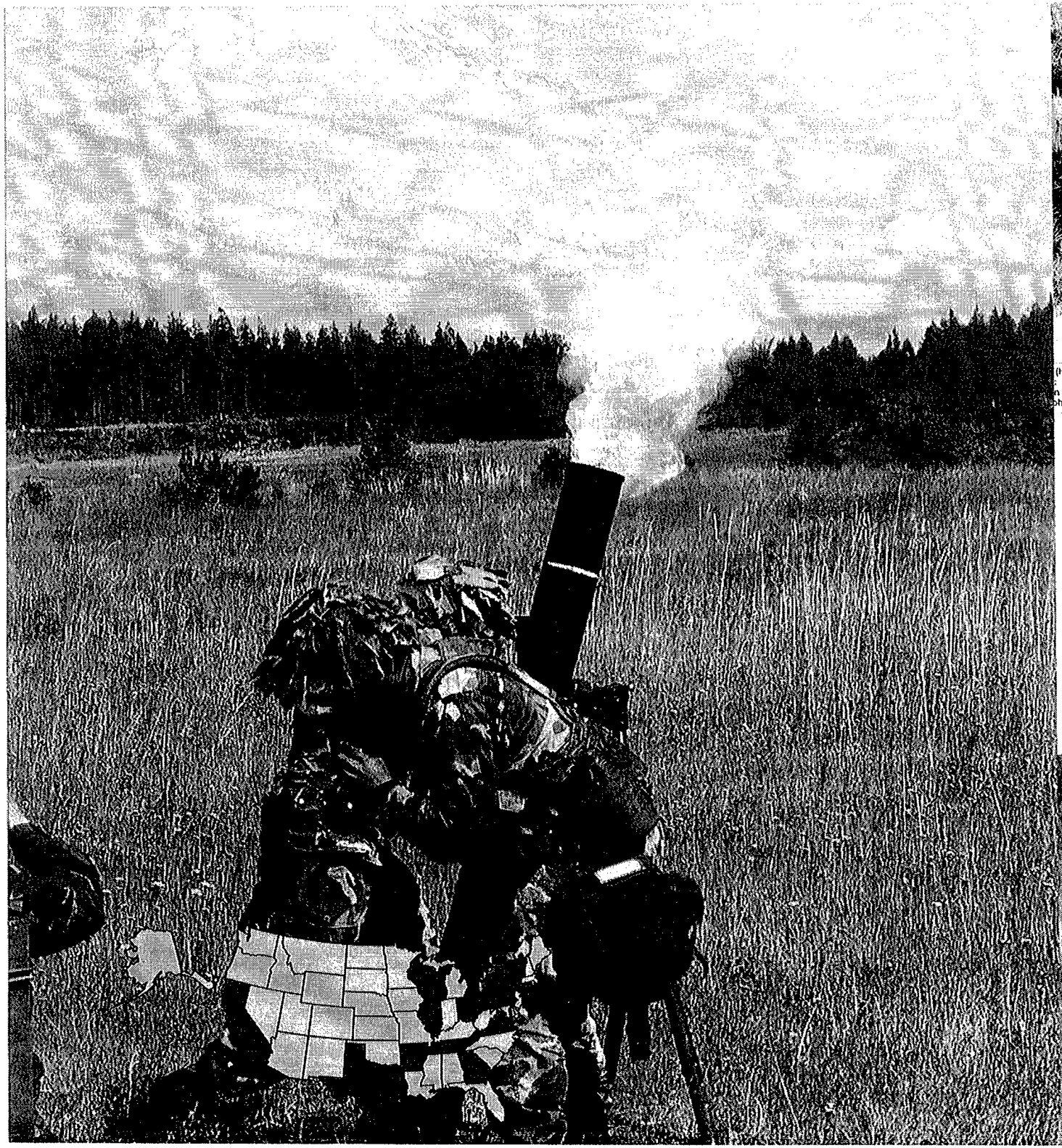
FOREIGN MILITARY SALES: Argentina, Botswana, Egypt, Greece, Israel, Lebanon, Norway, Portugal, Saudi Arabia, Spain

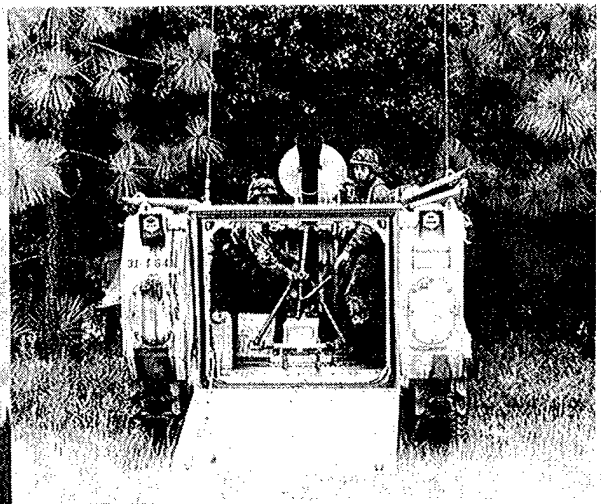
PROGRAM STATUS: In FY96, the M113 Program Management Office continued procurement of A3 upgrade kits and the conversion of selected M113 platforms to the A3 configuration.

PROJECTED ACTIVITIES: Selected M113s and M113 variants will continue to undergo conversion to the A3 configuration.

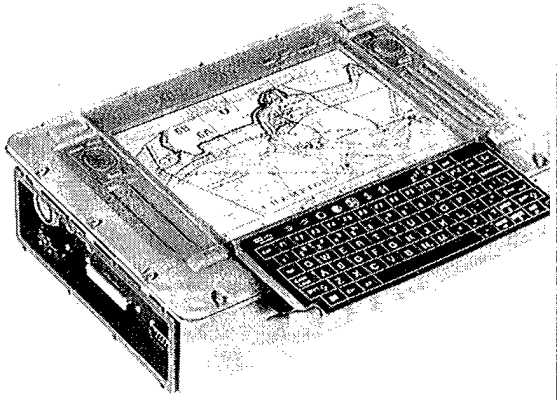
PRIME CONTRACTOR: Anniston Army Depot (ANAD) (Anniston, AL)
FMC (United Defense, LP) (Rosslyn, VA)

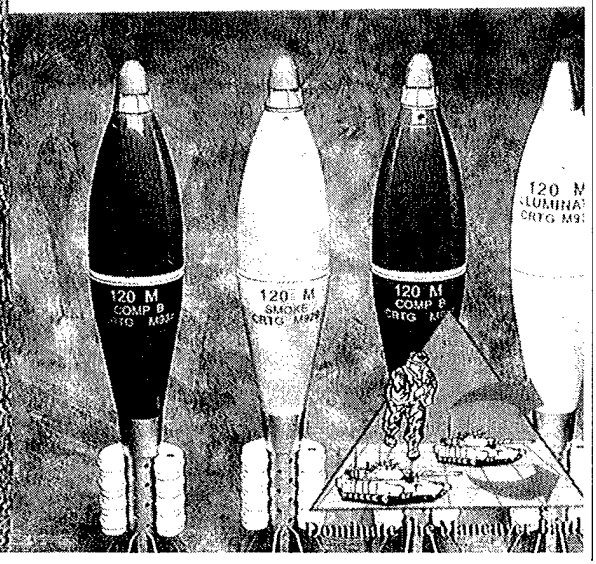
* See appendix for list of subcontractors.





(Handheld Terminal Unit)
LLC, DSSU, FDT
n Data Systems
hone: 605-532-5670





MISSION: The 120 mm mortar system provides organic indirect fire support capability to the maneuver unit commander.

CHARACTERISTICS: The 120 mm mortar system is a conventional smoothbore, muzzle-loaded mortar system that provides increased range, lethality, and safety compared to the WWII-vintage 4.2 in heavy mortar system it replaces in mechanized infantry, motorized, armored, and cavalry units. It is employed in both towed and carrier-mounted versions and fires a family of enhanced ammunition being produced in the United States.

Range:	7,240 m
Weight:	319 lb
Rate of fire:	16 rd/min for the first minute; 4 rd/min, sustained
Crew:	4 - carrier mounted (M1064); 5 - ground-mounted (M120)
Ammunition:	High-Explosive, Smoke, Illumination, Full-Range Trainer

FOREIGN COUNTERPART: The US Army 120 mm mortar system was adapted from the Israeli Army's 120 mm mortar system. 120 mm smoothbore mortars are used by Denmark, Finland, France, Germany, Israel, and other allied armies. The Russian-developed counterpart is the M43 120 mm mortar, which has a range of 5,700 meters, weighs 602 pounds, and has a six-man crew. Other threat 120 mm mortars include turreted and extended range Dual Purpose Improved Conventional Munitions (DPICM) ammunition.

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The 120 mm mortar is produced at Watervliet Arsenal, NY. The towed system, M120, was fielded in September 1991. Fielding of the carrier-mounted system, M1064, is currently in progress and will be complete in 1998. The Army plans to replace all of the fielded 4.2-inch mortars with 120 mm mortar systems. The family of 120 mm enhanced mortar ammunition is currently being produced by Lockheed Martin Ordnance Systems. The M933/934 High Explosive, and M929 Smoke rounds have been type classified for production. Incorporation of the new M734A1 multioption fuze significantly improves lethality, reliability, and electronic countermeasure protection of these rounds. The current M23 Mortar Ballistic Computer will be replaced on a 1-for-1 basis with the M30 Improved Mortar Ballistic Computer in 1997. The M30 was developed from commercial hardware and will allow direct digital communications with the maneuver force via Advanced Field Artillery Tactical Data System protocols. The M303 subcaliber tube insert has been type classified and will allow mortar crews to perform live fire training with stockpiled 81 mm ammunition.

PROJECTED ACTIVITIES: A Full Range Training Round XM931, and an Infrared Illumination Round, XM983, are under development. The 120 mm mortar system's tremendous growth potential is being exploited through an Advanced Technology Demonstration (ATD) exploring the potential of Precision Guided Mortar Munitions (PGMM) at ranges between 12-15 km. Additionally, technology leading to an extended range DPICM munition that includes a self-destruct capability is being evaluated.

PRIME CONTRACTORS: KDI (Cincinnati, OH); Lockheed Martin Ordnance Systems (Burlington, VT); Milan Army Ammunition Plant (Milan, TN); Pine Bluff Arsenal, AK; Red River Army Depot (Texarkana, TX); Watervliet Arsenal (Watervliet, NY)

* See appendix for list of subcontractors.

Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW)

MISSION: The Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW) provides a one-man, light-weight, shoulder fired, fire-and-forget, multiple purpose munition capable of defeating enemy forces in buildings, reinforced structures, bunkers and future light-weight armored vehicles.

CHARACTERISTICS: The MPIM/SRAW will consist of a disposable launcher/carry case equipped with a 2.5X telescopic sight that is compatible with current and future night vision devices. The shoulder launched missile will consist of a two stage, soft launch propulsion system with inertial guidance and an explosively formed penetrator with follow-through grenade warhead. The missile will be capable of being fired quickly from its carrying configuration and safely fired from enclosures.

Weight:	Less than 20 lb
Range:	20 - 500 m (target dependent)
Crew:	1
Lethality:	Capable of incapacitating personnel in bunkers and reinforced concrete/brick buildings, along with defeating modern and light armor.

FOREIGN COUNTERPART: No known foreign counterpart.

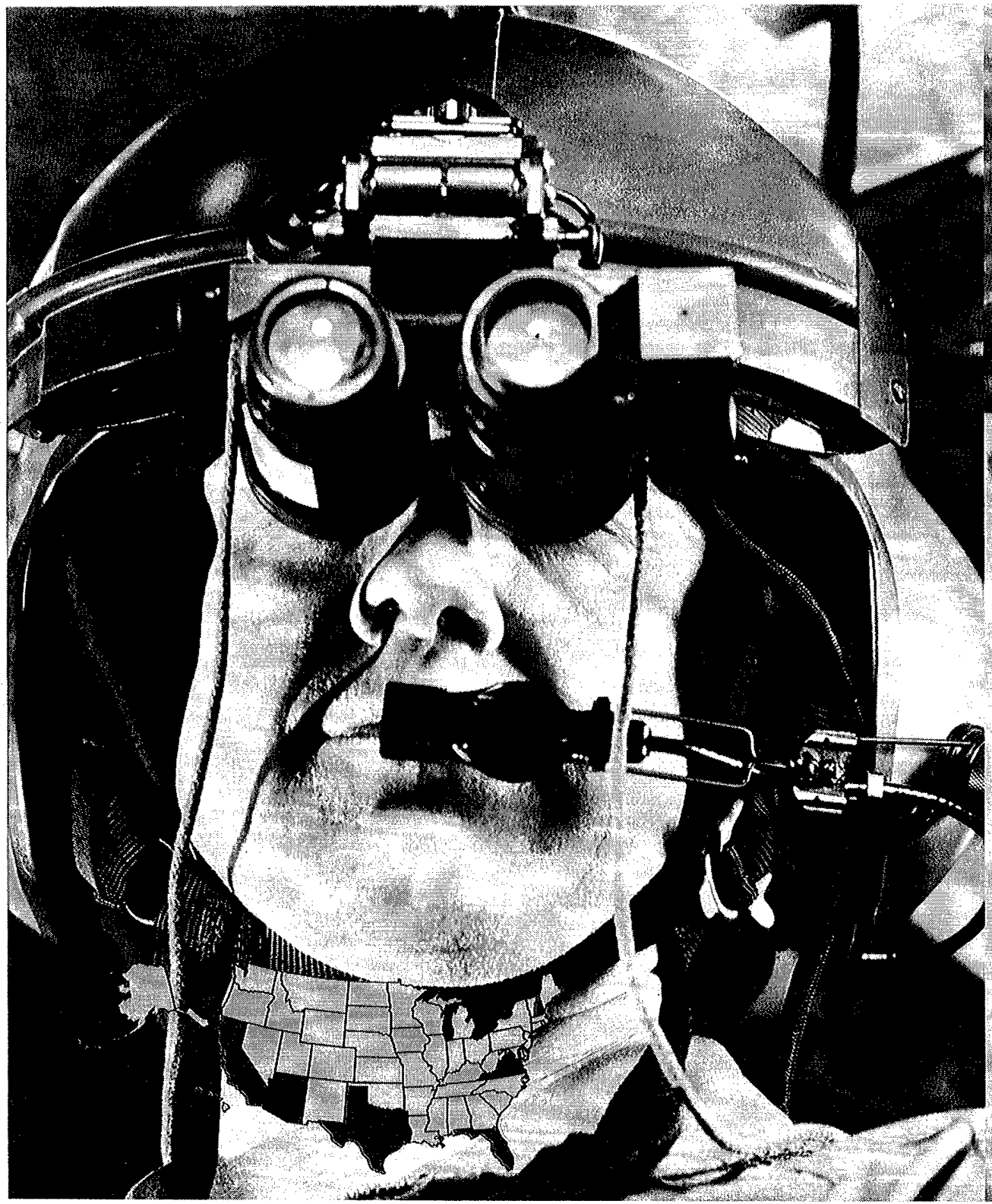
FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The MPIM/SRAW program completed its Technology Demonstration program in September 1996. On 2 October 1996, Lockheed Martin Aeronutronic, Rancho Santa Margarita, California, was awarded a contract for Phase I of the MPIM/SRAW Engineering and Manufacturing Development (EMD) program. This is an 18-month risk reduction effort. Phase II is an option for a follow-on, 47-month hardware qualification and initial operational test and evaluation phase.

PROJECTED ACTIVITIES: Warhead Trade Studies and Wind Tunnel test plan complete: 2QFY97.
Warhead Interface Control Document (ICD) complete: 3QFY97.
Vibration Characterization & System ICD complete: 4QFY97.

PRIME CONTRACTOR: Lockheed Martin (Rancho Santa Margarita, CA)

* See appendix for list of subcontractors.



Win the Information War

Dominate the Maneuver Battle

MISSION: Night Vision (NV) Image Intensification (I2), Laser, and Multi Sensor technologies provide today's soldier with the capability to operate more effectively and safely by day or night and under degraded battlefield conditions.

CHARACTERISTICS: The **AN/AVS-6 Aviator's Night Vision Imaging System (ANVIS)** is a lightweight, helmet-mounted, self-contained binocular system. The ANVIS provides image intensification for helicopter crew members to conduct night missions under minimal ambient light conditions. It is powered using existing aircraft power or a helmet-mounted battery pack. The **AN/AVS-7 Aviator's Night Vision Imaging System Heads-Up Display (ANVIS/HUD)** is designed to provide aviators with critical flight information superimposed on the visual image of the ANVIS. The system is electro-optical and provides both the pilot and copilot critical, real-time, high-resolution flight and navigational information. Its primary purpose is to enhance flight safety, ease the crew workload and heighten the crew members' situational awareness outside the cockpit. Future enhancement with a Flight Data Recorder is planned. The **AN/PVS-7D Night-Vision Goggle** is a light-weight, binocular goggle used by individual soldiers. The AN/PVS-7D uses a single passive third-generation image intensifier tube. It is used in combat, combat support and combat service support operations. Ancillary equipment include a helmet, protective eyecup, lens cover, compass and 3x magnifying lens. The **AN/PVS-14 Monocular Night Vision Device** is a third generation image intensification system designed to provide leaders of combat infantry units with a lightweight night vision device for use in observation and command & control. Interfaces with AN/PVS-7D head and helmet mount and 3x magnifier. Can also be mounted to small arms rail using TWS rail grabber. The **AN/PVS-10 Night Vision Sniperscope** is an integrated day/night sight for the M24 sniper rifle. The AN/PVS-10 provides the sniper the capability to acquire and engage targets during low and high ambient light conditions. The system utilizes third-generation I2 technology, mounts on the existing rail of the M24 and uses the same mil-dot reticle as the existing Leupold day scope. The magnification for day and night operation is 8.5X, and the system's maximum weight is 4.9 pounds. The **Lightweight Video Reconnaissance System (LVRS)** consists of a manportable Out Station and a vehicle mounted Base Station. The Out Station is used by surveillance or reconnaissance teams to capture, compress and transmit still frame images over military radios to the Base Station located at a higher echelon. **The Lightweight Laser Designator/Rangefinder(LLDR)** is an integrated vehicle mounted or manportable designator/rangefinder with day/night target location capability. It will replace older and heavier vehicle mounted systems and eliminate the need for separate systems performing the same target designation and rangefinding tasks. The **AN/PVS-6, Mini Eyesafe Laser Infrared Observation Set(MELIOS)** is a manportable, eyesafe laser rangefinder that accurately measures and displays range and vertical angle measurement data to selected targets. The **Target Location and Observation System (TLOS)** is a light-weight, self-contained, image intensified day/night sight that employs a near infrared low energy laser to actively acquire direct view and electro-optic targets.

FOREIGN COUNTERPARTS: I2, Laser, and Thermal devices are produced in many countries.

FOREIGN MILITARY SALES: AVS-6(V)1&2: Bahrain, Colombia, Greece, Jordan, Mexico, Saudi Arabia, Taiwan, Thailand, United Arab Emirates, PVS-6: Baltic States (Latvia), Saudi Arabia; PVS-7: Italy, Kuwait, Mexico, Portugal, Saudi Arabia, Taiwan

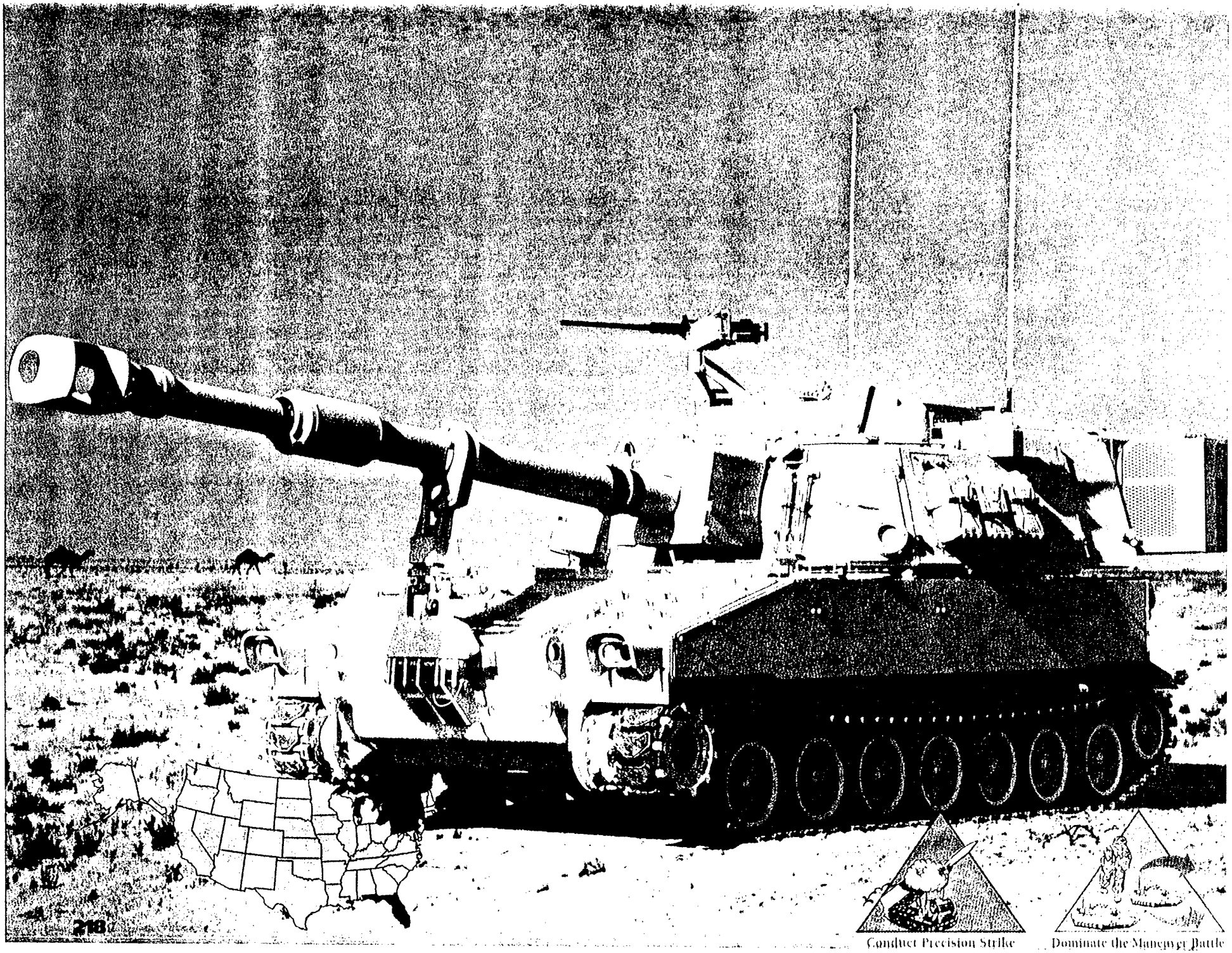
PROGRAM STATUS: Two multiyear contracts are in place (FY93-97) for AN/AVS-6, AN/PVS-7B, AN/PVS-7D and associated spare parts. ANVIS/HUD production deliveries began in FY95.

PROJECTED ACTIVITIES: FY97 single award of a multi-year contract for AN/AVS-6, AN/PVS-7D, AN/PVS-14 and tubes.

PRIME CONTRACTORS:

ITT (Roanoke, VA)
Texas Instruments (McKinney, TX)
Litton Industries (Garland, TX, Tempe, AZ & Orlando, FL)
TRACOR Aerospace, Inc. (Austin, TX)

*See appendix for list of subcontractors.


Conduct Precision Strike
Dominate the Maneuver Battle

MISSION: The Paladin provides the primary indirect fire support to heavy divisions and armored cavalry regiments.

CHARACTERISTICS: Like the earlier M109 models, the Paladin is a fully tracked, armored vehicle with a 155 mm howitzer. The Paladin includes an onboard ballistic computer and navigation system, secure radio communications, an improved cannon and gun mount, automatic gun positioning, automotive improvements, improved ballistic and nuclear-biological-chemical protection, driver's night vision capability, and built-in test equipment. The Paladin has improved responsiveness, survivability, lethality, and reliability compared to the earlier M109s.

Range:	30 km (with rocket-assisted projectile) 24 km (with unassisted projectile)
Response time:	Less than 60 seconds
Rate of fire	
Maximum:	4 rd/min for 3 min
Sustained:	1 rd/min
Main armament:	M284 155 mm cannon
Secondary armament:	.50 caliber machine gun
Weight:	32 ton (combat loaded)

FOREIGN COUNTERPART:

France:	155 GCT
Germany:	PzH 2000
Israel:	Slammer
United Kingdom:	AS90

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: Low-rate production began in September 1991 and achieved a First Unit Equipped in April 1993. A full-rate production contract was awarded in April 1993. 307 howitzers have been delivered to date, all at least two months ahead of schedule. The Army will acquire 914 Paladins as a product improvement of the current M109A2/A3 howitzer. A portion of the remaining M109 howitzer fleet will receive the M109A5 upgrade, which includes some automotive and crew nuclear-biological-chemical protection improvements and Paladin's M284 cannon and M182 gun mount.

PROJECTED ACTIVITIES: Production will continue during 1997 and through 1998.

PRIME CONTRACTOR: FMC Corp. (United Defense, LP) (Chambersburg, PA; York, PA)

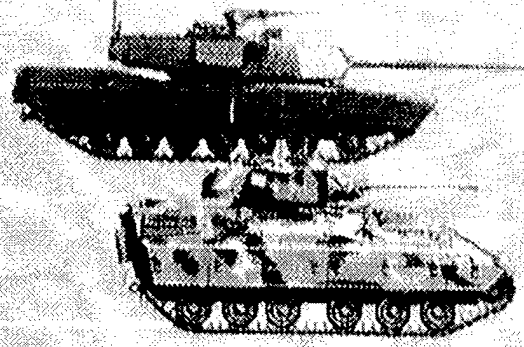
* See appendix for list of subcontractors.

1st Gen

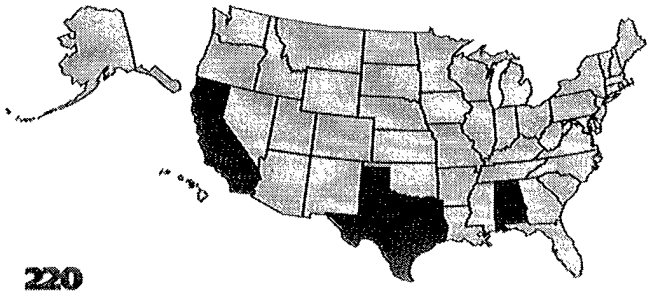
WFOV 3.4° x 6.8°
NFOV 1.1° x 2.2°

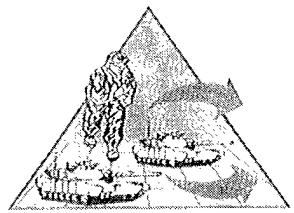
WFOV 7.5° x 15°
NFOV 2.5° x 5°

2nd Gen



WFOV 7.5° x 13.3°
NFOV 2.0° x 3.6°





Second Generation FLIR

MISSION: Second Generation Forward Looking Infrared (FLIR) will provide the Abrams Main Battle Tank, Bradley Fighting Vehicle, and Long Range Advanced Scout Surveillance system with a leap ahead target acquisition capability during all atmospheric and obscurant conditions, and permit them to "see the same battlespace." One goal of this program is to develop and produce a common FLIR to maximize economies of scale during production, and minimize life cycle costs.

CHARACTERISTICS: This new "common use" FLIR is the Army's first major Horizontal Technology Integration (HTI) program. One of the Army's key objectives in its quest to "Own The Night" is the Horizontal Technology Integration of Second-Generation FLIR technology in a number of new and existing platforms.

The concept is elegant in its simplicity. By using a common thermal sensor known as a B Kit that can be integrated into any candidate platform, the user community will be able to "see the same battlespace" and have a broad overmatch to potential adversary capabilities. The linkage between the B Kit and the perspective sights will be system specific platform links called A Kits.

The program, which entered engineering and manufacturing development in July 1994, will initially upgrade two candidate platforms selected by Army leadership, the M1A2 and M2A3. The current platform sight applications are: M1A2 Gunner's Primary Sight, M1A2 Commander's Independent Thermal Viewer, M2A3 Improved Bradley Acquisition system and Commander's I Independent Viewer, and the Long Range Advanced Scout Surveillance System (LRAS3). Potential exists for other Army programs such as Apache, Comanche, and future armored vehicles to benefit from HTI.

The present system concept will allow adaptation of this common sensor to any new platform application desired by Army leadership. In addition, this system will provide a battlespace observation edge for U.S. forces well into the next century. Commonality of FLIRs in multiple platforms facilitates development and fielding of future upgrades such as image fusion, automatic target recognizers, and target trackers.

FOREIGN COUNTERPART: No known foreign counterparts.

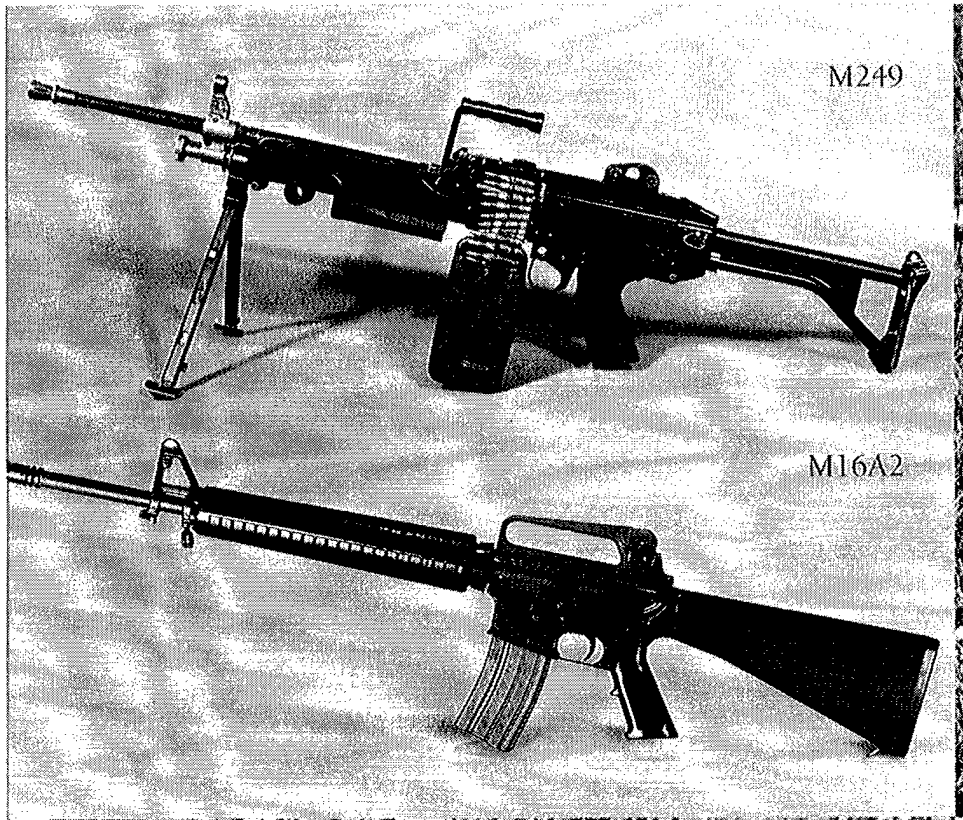
FOREIGN MILITARY SALES: No foreign military sales. However SGF has potential for applications in many NATO aircraft and ground tactical and combat vehicles.

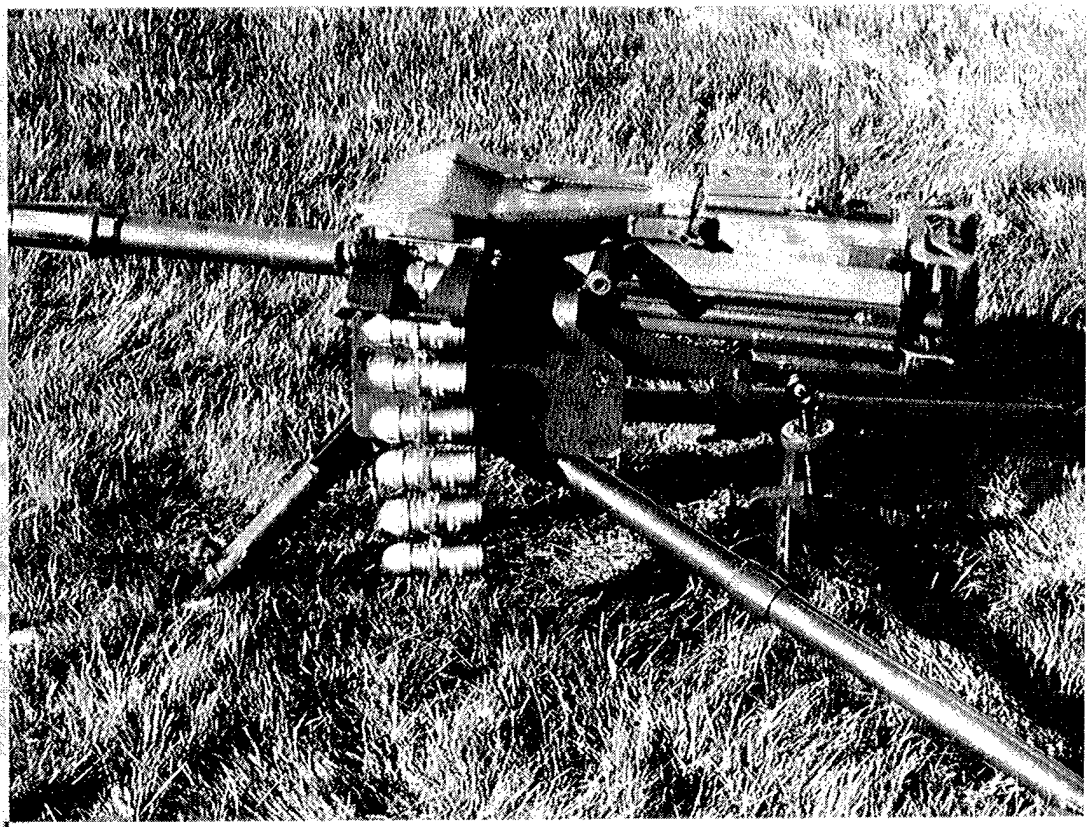
PROGRAM STATUS: Cost plus award fee, Engineering and Manufacturing Development contract for the HTI SGF was awarded 7 July 1994.

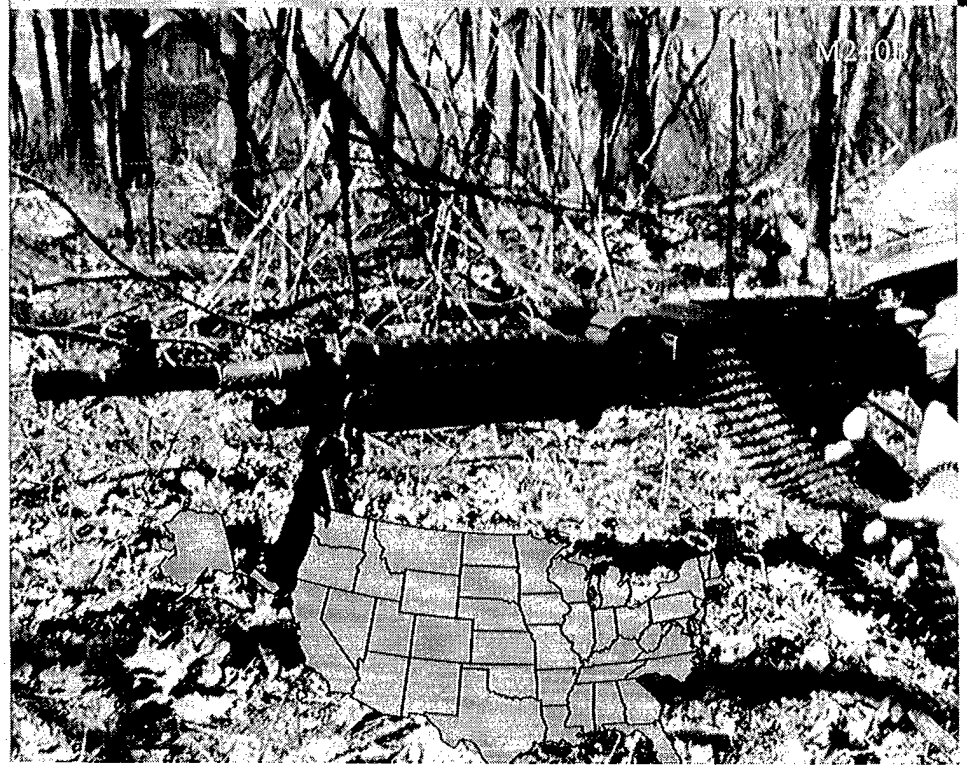
PROJECTED ACTIVITIES: M2A3 & M1A2 LRIP Award - 2QFY97.

PRIME CONTRACTOR: Texas Instruments (McKinney, TX)

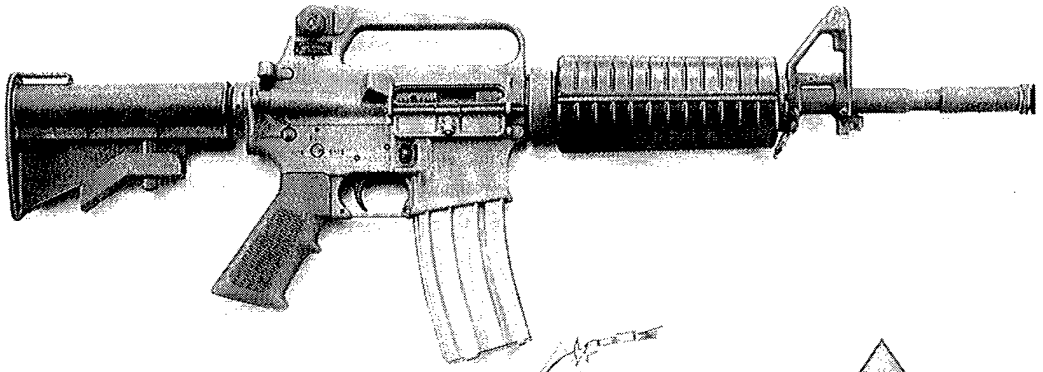
*See appendix for list of subcontractors.

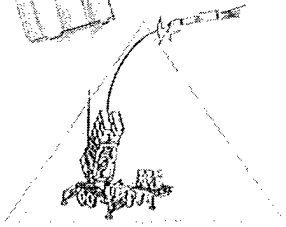




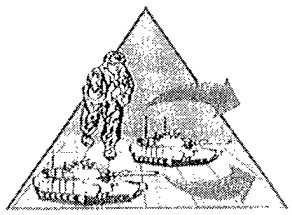


M4





Protect the Force



Dominate the Maneuver Battle

MISSION: Small Arms reassure, deter, and if necessary, compel adversaries by providing a capability for individuals and small units to engage targets with accurate, lethal, direct fire.

CHARACTERISTICS:

M4 Carbine: The M4 is a more compact version of the M16A2 rifle with a collapsible stock. It provides the individual soldier operating in close quarters the capability to engage targets at extended range with accurate, lethal fire. It achieves over 85% commonality with the M16A2 Rifle and will replace all .45 caliber M3 submachine guns and selected M9 pistols and M16 series rifles.

M16A2 Rifle: The M16A2 is a lightweight, air-cooled, gas-operated, low-impulse rifle. An improved version of the M16A1 it is replacing, the M16A2 incorporates improvements in sight, pistol grip, stock, and overall combat effectiveness. Accuracy is improved by incorporating an improved muzzle compensator, three-round burst control, and a heavier barrel, and by using the heavier NATO standard ammunition, which is also fired by the Squad Automatic Weapon.

M249 Squad Automatic Weapon (SAW): The M249 is a lightweight, gas-operated, one-man-portable automatic weapon capable of delivering a large volume of effective fire at ranges up to 800 meters. The basis of issue is one per soldier designated to fire in the automatic rifle role in all types of units. It is scheduled to replace the M60 7.62 mm medium machine gun in certain units.

M240B Medium Machine Gun: The M240B is a ground mounted, gas-operated, crew served machine gun. This highly reliable, 7.62 mm machine gun delivers more energy to the target than the smaller caliber M249 SAW. It will be issued to infantry, armor, and combat engineer units that require medium support fires and will replace the ground-mounted M60 series machine guns currently in use.

MK19-3 40 mm Grenade Machine Gun: A self-powered, air-cooled, belt-fed, blowback operated weapon, the MK19-3 is designed to deliver accurate, intense, and decisive firepower against enemy personnel and lightly armored vehicles. It is scheduled to replace selected M2 Heavy machine guns in selected units and will be the primary suppressive weapon for combat support and combat service support units. The MK19-3 is mounted on the HMMWV, M113 FOV, 5-ton trucks, and selected M88A1 recovery vehicles.

	M4	M16A2	M249	M240B	MK19-3
Caliber:	5.56 mm	5.56 mm	5.56 mm	7.62 mm	40 mm
Weight:	5.65 lb	8.9 lb	16.3 lb	27.6 lb	72.5 lb
Max effective range:	500 m	550 m	800 m	1,100 m	2,200 m (area target)

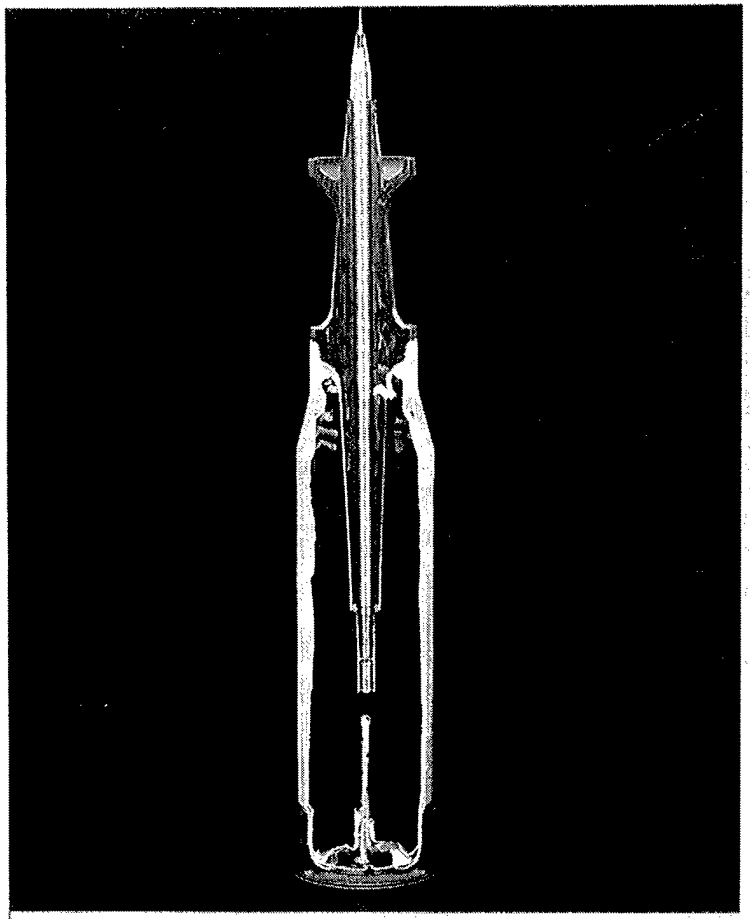
FOREIGN MILITARY SALES: Numerous foreign countries purchase US small arms.

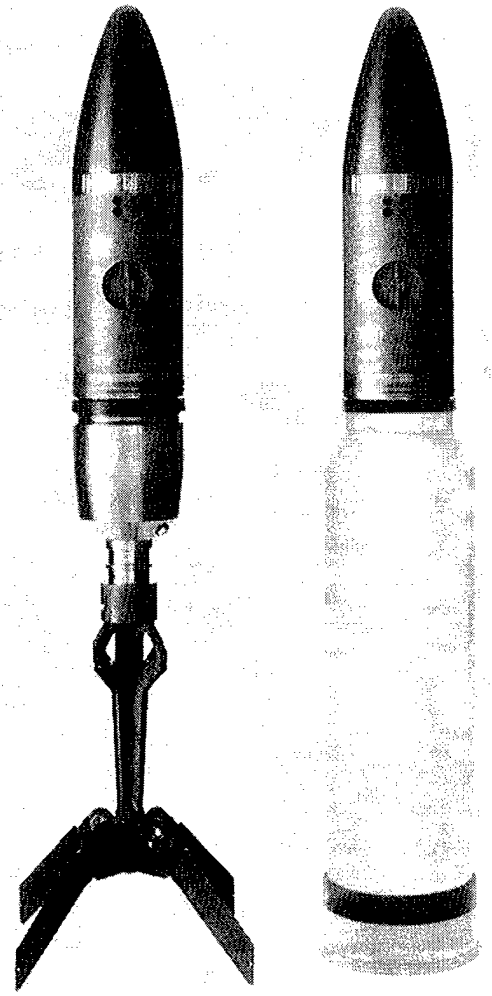
PROGRAM STATUS: All are currently in series production and fielding.

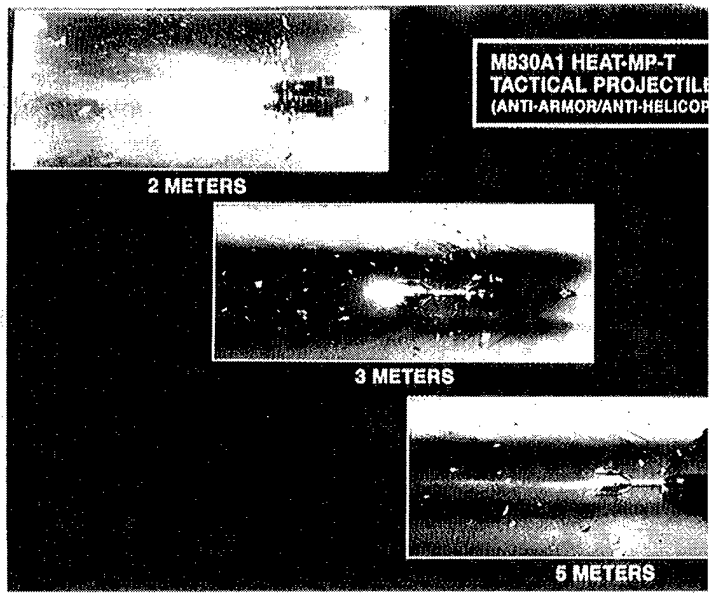
PRIME CONTRACTORS:

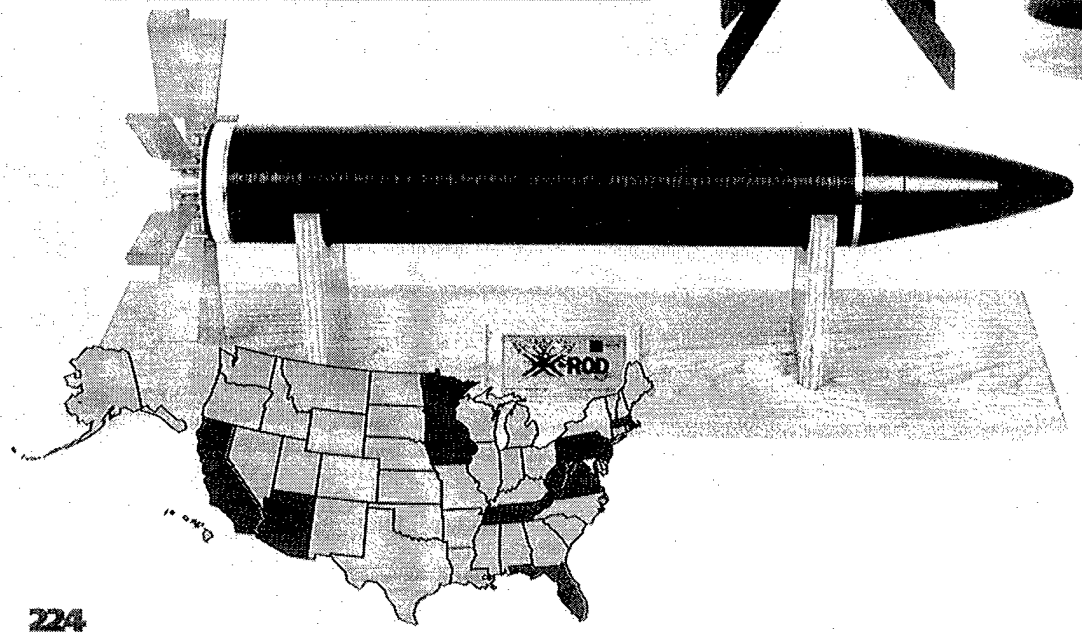
M4 Carbine:	TBD
M16A2 Rifle:	FN Manufacturing Inc. (Columbia, SC); Colt's Manufacturing Inc. (Hartford, CT)
M249 Squad Automatic Weapon:	FN Manufacturing Inc. (Columbia, SC)
M240B Medium Machine Gun:	FN Manufacturing Inc. (Columbia, SC)
MK19-3 Grenade Machine Gun:	Saco Defense Inc. (Saco, ME)

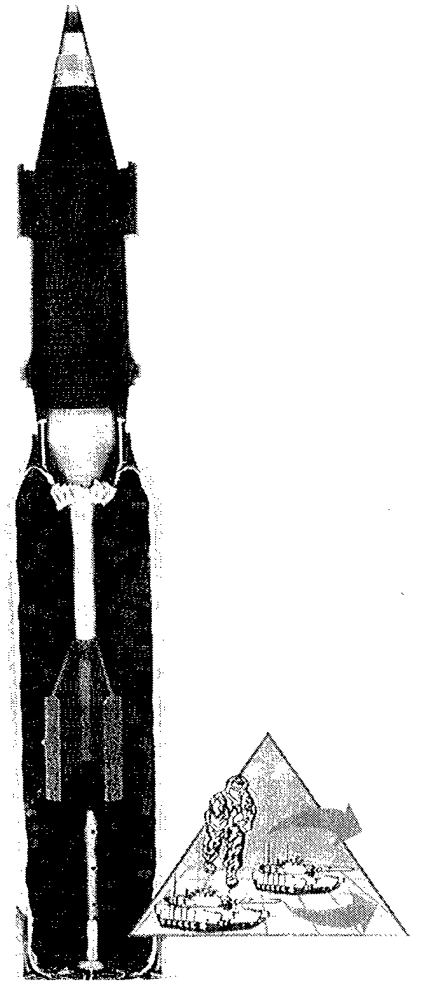
* See appendix for list of subcontractors.






M830A1 HEAT-MP-T
TACTICAL PROJECTILE
(ANTI-ARMOR/ANTI-HELICOP
2 METERS
3 METERS
5 METERS


ROD



MISSION: The 120 mm family of tank ammunition is fired from the M256 cannon on the M1A1/M1A2 tank. There are five basic cartridge types: Kinetic Energy (KE), Armor Piercing, Fin Stabilized, Discarding Sabot-Tracer (APFSDS-T - M829 series); High Explosive Anti-Tank (HEAT-T - M830); Multi-purpose Anti-Tank (MPAT - M830A1); Smart Target Activated Fire-and-Forget (XM943) and Tank Extended Range Munition-Kinetic Energy (XM1007). The Armament Enhancement Program (AEI) provides a family of ammunition designed to defeat future threats. The M829 series rounds, the MPAT - M830A1, STAFF - XM943 and TERM-KE-XM1007 all fall under the AEI umbrella.

CHARACTERISTICS: **APFSDS-T:** One-piece depleted uranium penetrator, combustible cartridge case, discarding sabot— M829, M829A1, M829A2, M829E3.
HEAT-T: Shaped charge warhead, combustible cartridge case - M830
MPAT: Shaped charge warhead, combustible cartridge case. Saboted projectile with manually selectable air/ground switch with RF proximity sensor for self-defense anti-helicopter capability—M830A1.
STAFF: Smart Target Activated Fire-and-Forget (XM943) munition with explosively formed penetrator (EFP) for top attack defeat of armor targets in defilade.
TERM-KE: Tank Extended Range Munition (XM1007)(previously called X-ROD), soft-launch, rocket-boosted, terminally guided, kinetic energy munition for anti-armor frontal defeat in line-of-sight engagements, with potential top attack to non line-of-sight. Capability against moving/maneuvering targets.

FOREIGN COUNTERPART: NATO tanks employ similar types of KE ammunition, however, the MPAT, STAFF and TERM-KE have no similar counterparts fielded in the world. Russian-designed tanks fire KE, high explosive fragmentation ammunition, and anti-tank guided missiles.

FOREIGN MILITARY SALES: AEI ammunition is strictly controlled for US Army use only. The only exception is M829 which has been sold to Egypt and Saudi Arabia

PROGRAM STATUS: The following rounds have been fielded to the Army: M829, M829A1, M829A2, M830, and M830A1. The M829A2, and M830A1 are in production now. A four year, sole source multi-year contract for the M829A2 was awarded in FY95. The XM943, STAFF cartridge is in the Engineering and Manufacturing Development phase, while the M829E3 and the XM1007 TERM-KE are in the initial stages of development.

PROJECTED ACTIVITIES: Multi-year production contracts for M829A2 will continue through FY98, as will continued development of STAFF and M829E3. FY97 is also the last planned production buy for the M830A1.

PRIME CONTRACTOR:

M830A1, XM943:	Alliant TechSystems (Brooklyn Park, MN)
XM1007:	Alliant Techsystems (Clearwater, FL)
M829A2, M830:	Olin Corp. (St. Petersburg, FL)

* See appendix for list of subcontractors.


Thermal Weapon Sight (TWS)
Medium Weapons TWS
Light Weapons TWS
Heavy Weapons TWS
TWS P3I

MISSION: The AN/PAS-13, Thermal Weapon Sight (TWS) allows the US Army Infantry Warfighter the ability to continue day or night operations during degraded visual conditions caused by smoke, fog or dust. These individual- and crew- served weapon gunners will truly "own the night" with this unparalleled capability.

CHARACTERISTICS: The TWS allows the soldier to see deep into his battlefield, increases surveillance and target acquisition range, and penetrates obscurants, day or night. The Thermal Weapon Sight family will replace the image intensifier night sights currently in use for small arms. The TWS is a second generation Forward Looking Infrared (FLIR), is digital battlefield compatible, and provides a standard video output for training, image transfer, or remote viewing. The P3I TWS will incorporate a rangefinder, compass, vertical angle, cant measurement, and aimpoint adjustment for ballistic solution. TWS is presently in limited procurement.

	Range (in meters)	Weight (in pounds)	Field of View (in degrees)	Weapons Supported
Light Wpns TWS:	550	4.3	15	M16, M4,M203, M136
Medium Wpns TWS:	1100	4.5	9 & 15	above plus M249, M60
Heavy Wpns TWS:	2200	5.0	3 & 9	M2, MK19, M24

FOREIGN COUNTERPART: No known foreign counterparts.

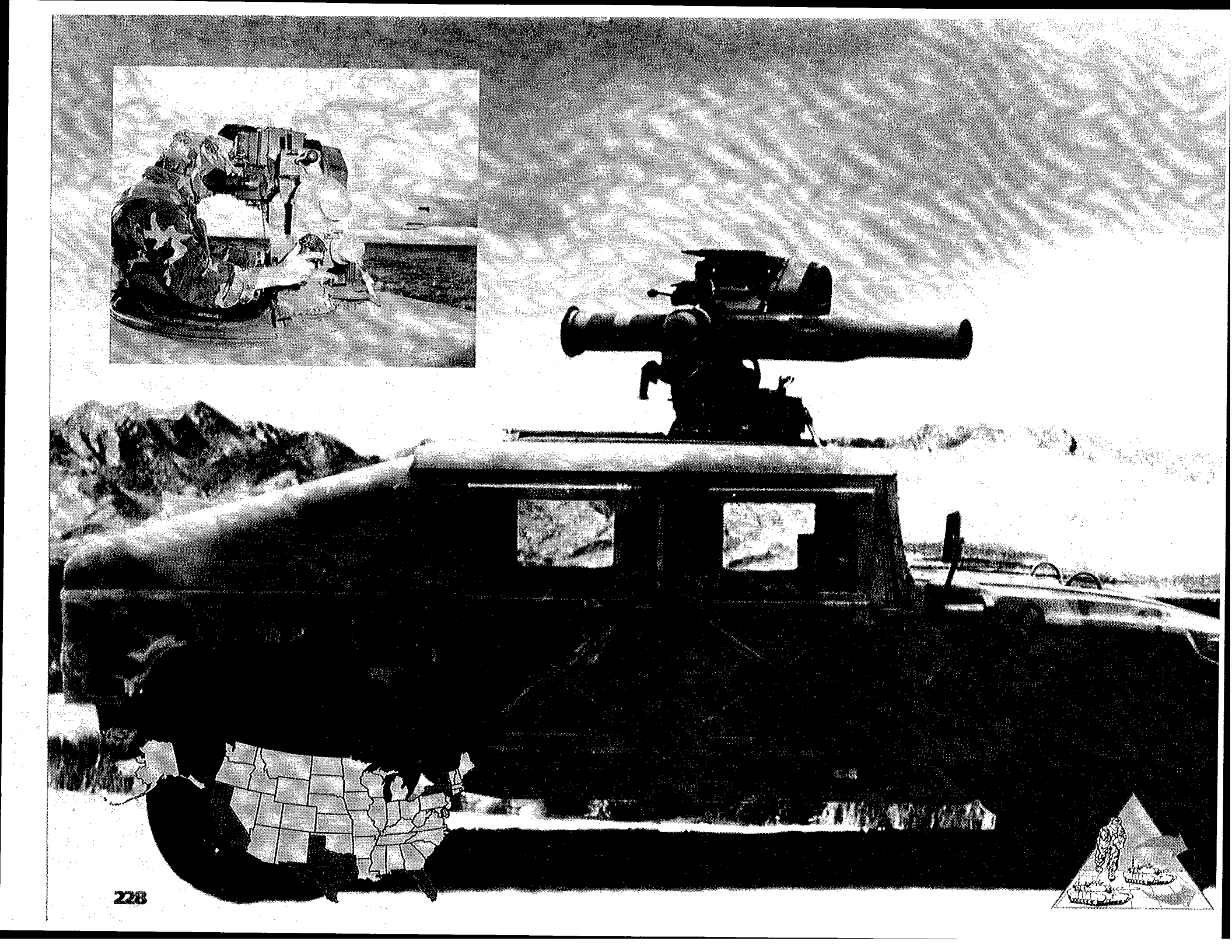
FOREIGN MILITARY SALES: No foreign military sales. However, TWS has considerable potential for use by NATO countries interested in Rationalization, Standardization and Integration.

PROGRAM STATUS: Currently in limited production. Type Classification Standard in 2QF97.

PROJECTED ACTIVITIES: Initial fielding scheduled for 2QFY97.

PRIME CONTRACTOR: General Motors (Hughes Aircraft Company) (El Segundo, CA)

*See appendix for list of subcontractors.



TOW Improved Target Acquisition System (ITAS)

MISSION: The TOW Improved Target Acquisition System (ITAS) is a materiel change to the current ground TOW 2 weapon system for first-to-deploy light forces. ITAS will increase target acquisition ranges and have the ability to fire all configurations of TOW missiles while allowing room for growth for follow-on missiles.

CHARACTERISTICS: The ITAS will be fielded at battalion level, replacing TOW 2 in light infantry units. The ITAS modification kit consists of an integrated (Day/Night Sight with Laser Rangefinder) Target Acquisition Subsystem, Fire Control Subsystem, Battery Power Source, and modified Traversing Unit. The ITAS will operate from the High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) and the dismount tripod platform.

FOREIGN COUNTERPART: No known direct foreign counterpart. Hughes Aircraft Company (HAC) Spanish-assembled Light Weight Launcher is a somewhat similar but less capable system.

FOREIGN MILITARY SALES: Based on the number of fielded TOW systems, foreign military sales potential is high.

PROGRAM STATUS: ITAS, after recently completing qualification and operational testing (4QFY96), is currently conducting a reliability growth program which has extended the EMD period of performance in accordance with Milestone IIIA Army Decision Memorandum. ITAS LRIP contract was awarded 30 September 1996 with a production quantity of 25 units.

PROJECTED ACTIVITIES: Reliability growth effort directed during the LRIP Decision is currently being conducted. LRIP is underway and will include Production Qualification Test.

PRIME CONTRACTOR: Texas Instruments (McKinney, TX)

*See appendix for list of subcontractors.

MISSION: The TOW (Tube-Launched, Optically Tracked Wire Command-Link Guided) missile is a long-range, heavy anti-tank system designed to attack and defeat armored vehicles other targets, such as field fortifications.

CHARACTERISTICS: The TOW is found at battalion level and is mounted on the Bradley Fighting Vehicle System (BFVS), the Improved TOW Vehicle (ITV), the High Mobility Multi-purpose Wheeled Vehicle (HMMWV), and the AH-1S Cobra Helicopter. The system consists of a tripod, traversing unit, missile guidance set, launch tube, optical sight, battery assembly, and any of the five missile variations. The system also includes a thermal sight that provides a capability for operations at night, in reduced visibility, and in a countermeasure environment. The missiles are all-up rounds encased in a disposable container.

	MISSILE	
	TOW 2A	TOW 2B
Missile weight	47.1 lb	49.8 lb
Missile length	46.1 in	46.1 in
Reliability:	96%	98%
Min range:	65 m	200 m
Max range:	3750 m	3750 m

FOREIGN COUNTERPART:

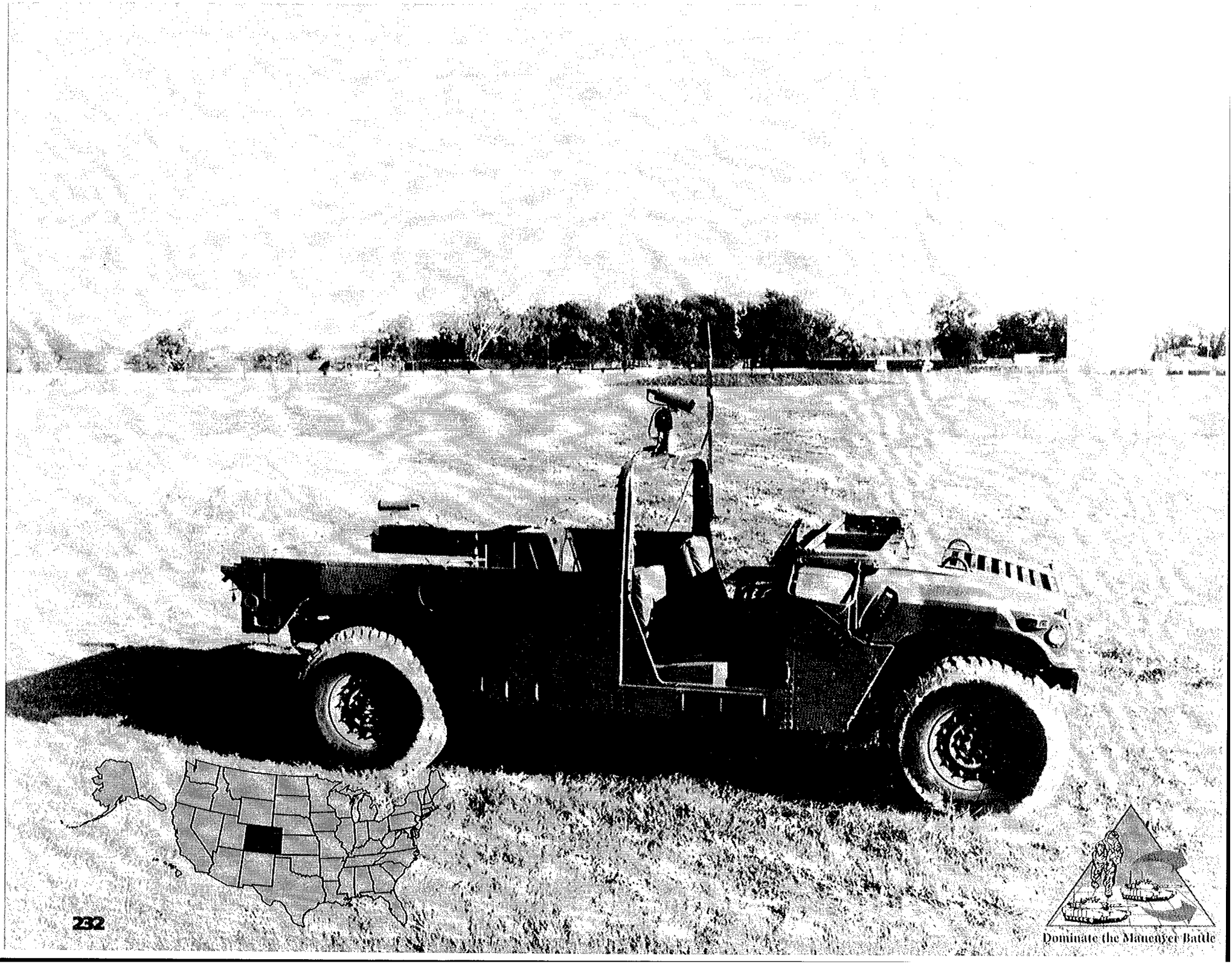
France/Germany	HOT 2
France/Germany	MISSION
Russia	AT-4/5/6
Sweden	BOFORS BILL
United Kingdom	MILAN 2

FOREIGN MILITARY SALES: The TOW is currently in use by more than 46 other nations as their primary heavy anti-armor weapon system.

PROGRAM STATUS: The TOW Weapon System entered its Production and Deployment phase with the Basic TOW in 1970. Since that time, there have been five variations of the missile and two variations of the TOW subsystem. The TOW 2B replaced the TOW 2A as the standard production missile in 2QFY92 and will join the more than 100,000 missiles and 14,000 platforms already in the field.

PROJECTED ACTIVITIES: Continue TOW 2B missile production to complete Army buys, TOW 2A and 2B Foreign Military Sales.

PRIME CONTRACTOR: General Motors (Hughes Missile Systems Company) (Tucson, AZ)



MISSION: The Vehicle Teleoperation Capability (VTC) will provide a capability to easily transform existing vehicles into teleoperated vehicle systems to operate in extremely hazardous situations to reduce loss of life and increase vehicle survivability.

CHARACTERISTICS: The VTC will be a kit which can be easily installed on existing vehicles to enable teleoperation of the vehicle and its payload. Once installed, the kit will allow easy transition between manned and unmanned configurations, allowing the commander additional options when conducting operations in extremely hazardous situations. A high degree of commonality will be required to reduce program procurement and support costs. Prototype kits have been installed for demonstration programs on D7G bulldozers for beachhead mine clearing, M1 chassis for obstacle and minefield breaching, and HMMWVs for mine detection and countermeasures through the use of acoustic, seismic, and IR signatures acting as decoys to smart mines.

FOREIGN COUNTERPART: No known foreign counterpart.

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The VTC is currently in a combined Concept Exploration/ Program Definition and Risk Reduction phase of development. The Standardized Teleoperation System—the core teleoperation capability for VTC programs—is currently installed on seven turret-less M-60 chassis (Panther) and is being used for countermine operations in Bosnia.

PROJECTED ACTIVITIES: Technical testing will be initiated in 2QFY97. Milestone I/II is scheduled for 4QFY97. Robotics Battle Lab Experiment with Terrain Dominance Battle Lab is planned for late FY97.

PRIME CONTRACTOR: Omnitech Robotics (Englewood, CO)


CSTA
6621

MISSION: The Volcano system is a rapidly deployed mine system that can be delivered from a UH-60 helicopter and a host of ground vehicles. The system can be employed offensively and defensively to delay enemy movement, isolate the battlefield and reinforce friendly fires.

CHARACTERISTICS: The delivery system consists of a dispenser control unit, one to four launcher racks and unique mounting hardware. Each launcher rack is capable of holding 40 mine canisters with a 5:1 mix of anti-tank and anti-personnel mines. The air system is capable of deploying 960 mines in less than 30 seconds.

FOREIGN COUNTERPARTS:

France:	Minotaur
Germany:	Skorpion
Italy:	Istrice
U.K.:	VLSMS

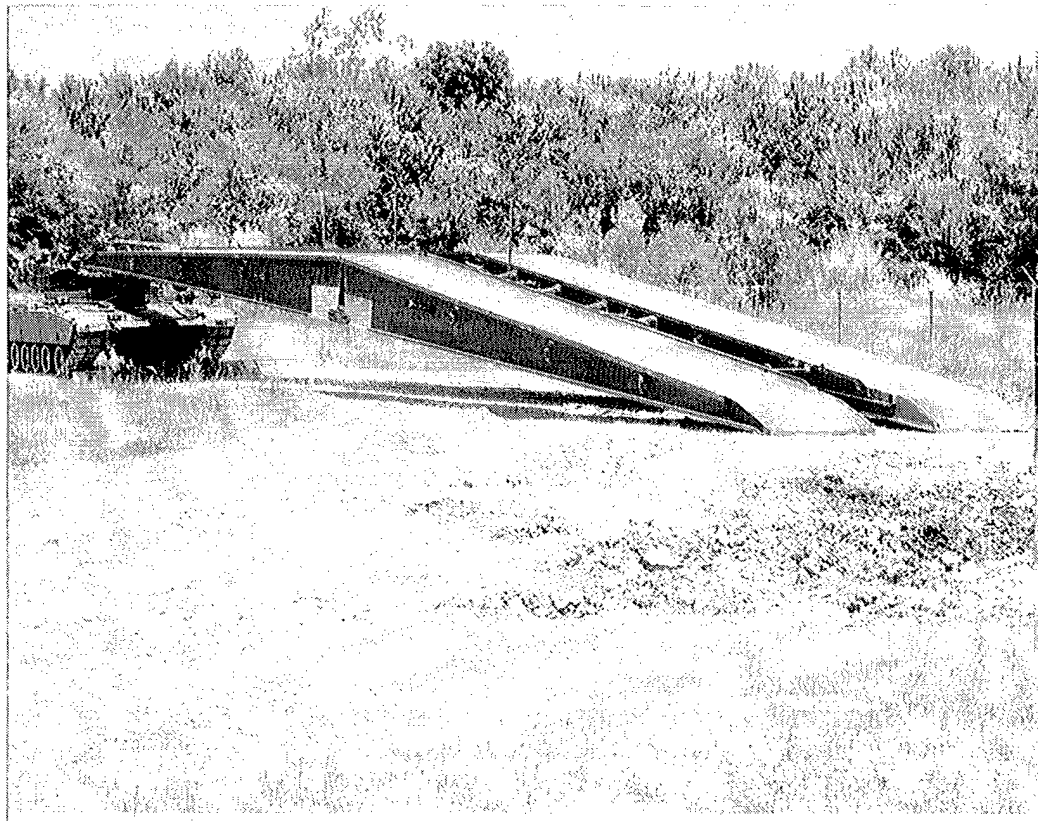
FOREIGN MILITARY SALES: No foreign military sales.

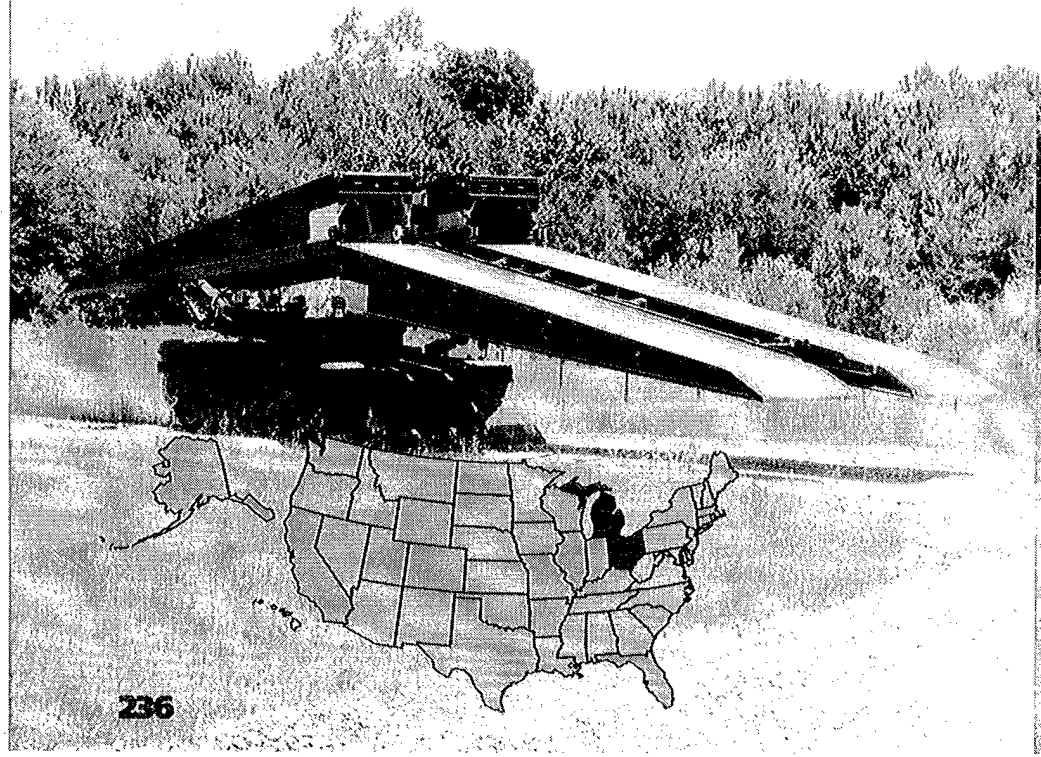
PROGRAM STATUS: The 5-ton truck delivery system was type classified in January 1989, the M548A1 version was type classified in October 1991 and the air version was type classified in June 1991. Troop NET of the 5-ton and the M548A1 are ongoing and troop NET of the air system started 4QFY95. A new improved anti-tank mine (MSEP) was included in the FY94 mine buy. The last Volcano production buy occurred in FY95.

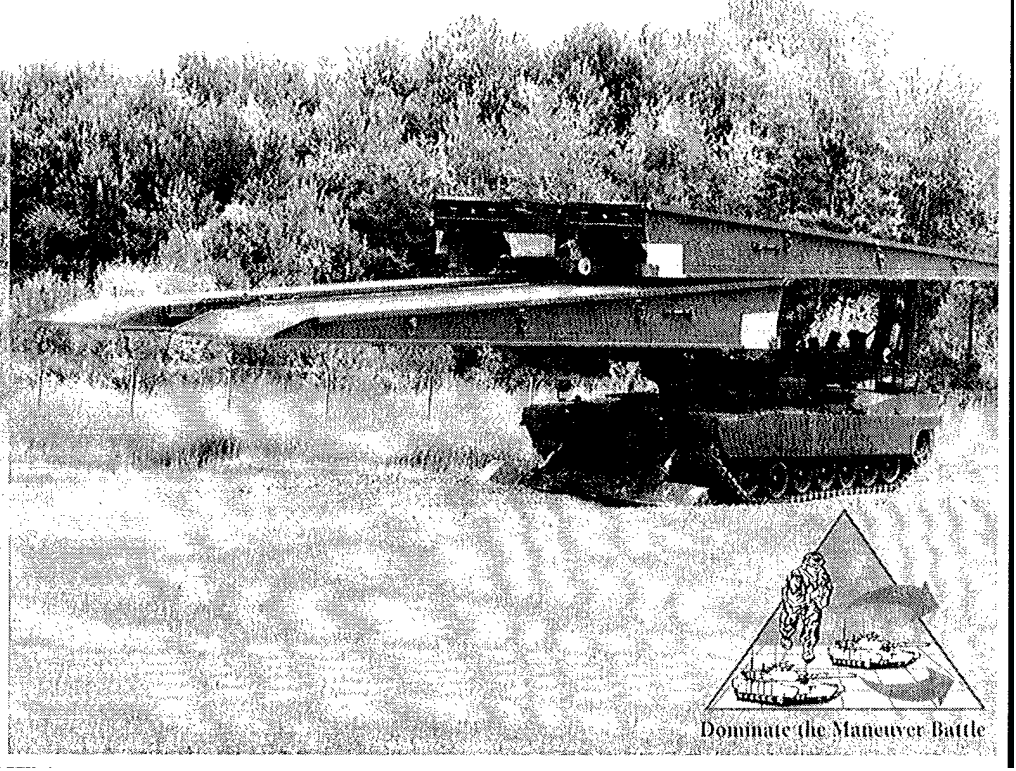
PROJECTED ACTIVITIES: Deliveries of the improved M89A1 canisters began October 1996 and continue through June 1997.
Deliveries of the M548 mounted Dispenses will occur between August 1996 and July 1997.
Deliveries of the air system will be completed by March 1997.
Deliveries of the 5-ton Truck Dispenses will be completed by July 1997.

PRIME CONTRACTOR: Alliant Techsystems (Edina, MN)
Intellitech (Deland, FL)

* See appendix for list of subcontractors.







MISSION: The Wolverine provides assault bridging support for forward, heavy-maneuver forces.

CHARACTERISTICS: The Wolverine launcher is mounted on an M1A2 Abrams System Enhancement Program (SEP) chassis and is operated by a two-man crew. The bridge is 26 meters long and can span gaps up to 24 meters. It will support an MLC 70 loading crossing at 16 kph. The bridge is launched from under armor in 5 minutes and retrieved in less than 10 minutes.

The Wolverine will increase maneuver force mobility by allowing units to transit such gaps as tank ditches, road craters, and partially damaged bridge sections. The current Armored Vehicle Launched Bridge (AVLB) only supports Abrams tank units using a caution crossing at reduced gap length (15 meters) and reduced crossing speed.

FOREIGN COUNTERPART:

China:	Type 84
France:	AMX (AVLB)
Germany:	BLG-60; Biber
Russia:	MTU-20; MTU-72
Slovakia:	MT-55
South Korea:	K-1
United Kingdom:	Chieftain

FOREIGN MILITARY SALES: No foreign military sales.

PROGRAM STATUS: The program is currently in Engineering and Manufacturing Development (EMD). The contract for Phase II of EMD was awarded in January 1994. Phase II includes the design, fabrication, and integration of the bridge system onto the Abrams chassis. Full-up system testing began 3QFY96. Prototype delivery occurred in June and July 1996 to support Production Qualification Testing and Logistics Demonstration.

PROJECTED ACTIVITIES: A Low-Rate Initial Production decision is planned for 2QFY97.

PRIME CONTRACTOR: General Dynamics (Land Systems Division) (Sterling Heights, MI)

* See appendix for list of subcontractors.

Ojective Individual Combat Weapon (OICW) Advanced Technology Demonstration (ATD) (1998-1999):

The objective individual combat weapon ATD will demonstrate a potential replacement for the 5.56-mm M16 family of rifles and the 40-mm M203 grenade launcher. Its goal is to dramatically improve the probability of hit, lethality and versatility in all operational environments. Weapons concepts being pursued by two competing contractors, AAI Corp. and Alliant Techsystems, both feature a revolutionary, ergonomically designed and integrated weapon system, coupling the firepower of 20-mm air bursting and 5.56-mm kinetic energy projectiles. These concepts have become feasible because of recent advances in miniaturized fuzing and modular, opto-electronic fire control systems. The bursting munition capability allows a soldier to attack personnel who are in defilade, such as those in or behind structures that one might encounter in urban combat.

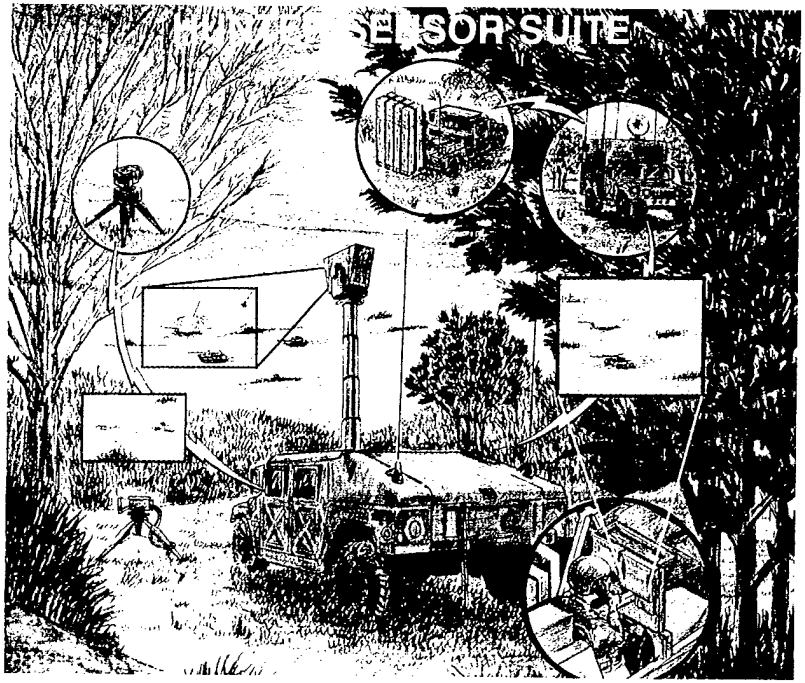
Application of controlled air-bursting munitions will provide decisive target effects, providing a new, currently unavailable capability to our troops for peacekeeping, peace enforcement, counterterrorism and surgical strike missions. The 5.56-mm kinetic energy weapon provides direct fire and suppressive fire capabilities. The OICW is featured as the individual weapon for the future land warrior. In 1999, a battle lab experiment at Ft. Benning, GA, will include safety-certified weapons and live fire demonstrations.

Rapid Force Projection Initiative (RFPI) Advanced Concept Technology Demonstration (ACTD) (1994-2000):

The RFPI ACTD will provide early entry forces with advanced technologies and systems to make them more survivable when encountering a heavy force. The purpose of RFPI is to address the operational capability requirements, developed by TRADOC, for lethality and survivability of light forces while maintaining the inherent strategic deployability of these forces. RFPI is based on a "system of systems" concept of Hunters and Standoff Killers and will demonstrate technology solutions which greatly expand the battlespace of light forces. The operational capability enhancements offered by RFPI will enable the light force commander to mass precision fires on threat forces, including armor, at ranges beyond which they can respond. This capability will greatly increase the survivability of early entry forces. The expansion of the light force battlespace is accomplished through the employment of a suite of sensors (Hunters) which will detect threat forces before they can engage the friendly force. The Hunters will provide near-real time digital information through a Light Digital Tactical Operations Center (LDTOC) element, which will match the target with an appropriate weapon, dramatically reducing sensor-to-shooter timelines and providing the commander with the ability to synchronize massed fires on enemy forces. Ground and aerial Hunter systems are equipped with advanced sensor packages capable of detecting targets well forward of friendly forces. Near-real time target information is relayed from the Hunters through a battlefield computer network to the Standoff Killers. These standoff systems are designed to engage and kill enemy armor forces with long-range precision munitions. RFPI ACTD simulation activities will identify the combat worth of each ATD/TD through evaluations performed in the context of the performance of existing fielded and evolving systems in simulated rapid deployment scenarios. Through the integration of field demonstrations including Distributed Interactive Simulation (DIS) connectivity, ATDs/TDs will be scrutinized at a

level heretofore not possible. The RFPI ACTD will integrate simulation and the novel technologies produced by individual ATDs/TDs into a large-scale field experiment in full coordination with TRADOC, Battle Labs, and other Users. The ACTD is a tool for the supporting User elements to explore emerging warfighting concepts and doctrine through planning, conduct of, and participation in the ACTD large scale field experiment. The ACTD provides an opportunity for extensive User interaction with the new RFPI Hunter Standoff Killer (HSOK) concept and its emerging technologies while encouraging User exploration of a variety of excursions to current (baseline) procedures. The U.S. Army Forces Command (FORSCOM) has selected an element of the XVIII Airborne Corps to serve as the RFPI ACTD Experiment Force. This unit will retain selected experiment materiel (residuals) for at least two years to perform an extended User evaluation and to allow arrangements for long-term retention which may potentially result in acquisition decisions for selected high-payoff systems. The enhancements to the operational capability requirements of early entry and light forces provided by RFPI technologies will significantly reduce threat combat power prior to the occurrence of the direct fire battle. The capability to overmatch any threat force with highly deployable forces is essential for the success of a force projection Army.

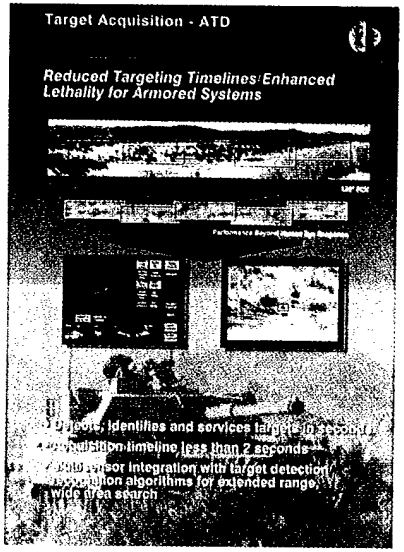
Hunter Sensor Suite Advanced Technology Demonstration (ATD) (1994-1997): This ATD will develop and demonstrate advanced sensor suite technology on a hunter/scout vehicle to provide on-the-move, long range target acquisition and precision target location information with reduced targeting hand-off timelines to standoff killers. The long range acquisition capability will be accomplished by using a stabilized, mast mounted second generation FLIR, day TV, and vehicle mounted acoustic cueing sensors. Precision targeting will be through an eyesafe laser rangefinder, GPS, north-seeking module and precision gimbals. Aided target recognition will be employed to reduce the operator's time to detect. Pacing technologies include: second generation focal plane arrays, advanced signal processing hardware, image compression/transfer techniques, ground-based aided target recognition/tracking algorithms, acoustic sensors, and long range optics. Additionally, the ATD will provide a C4I interface for transmission of voice and digital messages, as well as imagery. The Hunger Sensor Suite will be integrated on a hunter vehicle for use in the RFPI Advanced Concept Technology Demonstration (ACTD). Supports: Early Entry Light Forces.



Enhanced Fiber Optic Guided Missile (EFOGM) Advanced Technology Demonstration (ATD) (94-01):

The Enhanced Fiber Optic Guided Missile (EFOGM) is the primary "killer" within the "hunter/standoff killer" concept of the Rapid Force Projection Initiative and the OSD-approved RFPI ACTD. The EFOGM system is a multi-purpose, precision kill weapon system. The primary mission of the EFOGM is to engage and defeat threat armored combat vehicles, other high value ground targets, and hovering or moving rotary wing aircraft that may be masked from line of sight direct fire weapon systems. In addition, the system can be used to surgically strike with minimal collateral damage. EFOGM is a day/night, adverse weather capable system that allows the maneuver commander to extend the battle space beyond line of sight to ranges up to 15 kilometers. The system consists of a gunner's station, a tactical missile, and a fiber optic data link. The missile can navigate to the target area, and the gunner can intervene at any time to lock on and engage any detected targets. The gunner views the flightpath and target via a seeker on the missile linked to the gunner's video console. The missile to be demonstrated will incorporate an IR imaging seeker, a variety of advanced targeting functionalities and a global positioning system (GPS)-based inertial measurement unit for accurate targeting. Beginning 4QFY98, EFOGM will participate in the RFPI ACTD at Fort Benning, GA. In a deployable demonstration, EFOGM will undergo a two-year Extended User Evaluation (EUE) with the XVIII Airborne Corps beginning in FY99 during which an EFOGM Company deployed with a Company Command and Control Element, 3 Platoon Leader's Vehicle, and 12 EFOGM launchers to support an Infantry Brigade Task Force.

Target Aquisition Advanced Technology Demonstration (ATD) (94-98):



The Target Acquisition ATD will demonstrate a combat vehicle, multi-sensor suite to provide automated wide area search, acquisition, identification and prioritization of targets. These technologies will allow reduced crew workload and decreased target acquisition timelines, in support of lethal, deployable combat vehicles. The sensor suite consists of two sensor gimbals. A standard second generation FLIR, multifunction laser, and TV camera are housed on one platform. A second sensor platform contains a Moving Target Indicator (MTI) millimeter radar. The two gimbals search independently and provide target cues to the operator or to the other sensor platform. The multifunction laser will have three operating modes: rangefinding, designating, and a non-imaging ladar. The ladar data is fed directly into the aided target recognition processor to allow for FLIR/ladar fusion and synergistically improve performance. Supports: Future Scout/Cavalry Vehicle, M1A2 SEP, Future Combat System.

Rotorcraft Pilot's Association (RPA) Advanced Technology Demonstration (ATD) Program (1993-1999): The RPA ATD program objective is to establish revolutionary improvements in combat helicopter mission effectiveness through the application of artificial intelligence for cognitive decision aiding and integration of advanced pilotage sensors, target acquisition, armament and fire control; communications, cockpit controls and displays; navigation; survivability; and flight control technologies.

The goal of the RPA ATD is to significantly increase the mission effectiveness of our combat aviation systems. Revolutionary mission equipment package technologies will be integrated with high-speed data fusion processing and cognitive decision-aiding expert systems to achieve maximum effectiveness and survivability for our combat helicopter forces.

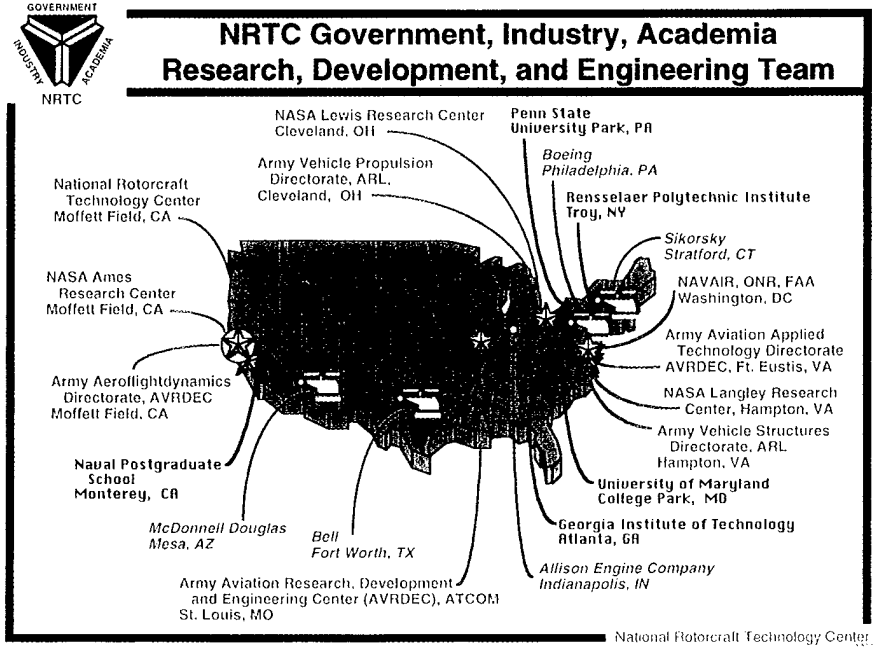
The RPA will expand aviation's freedom of operation, improve response time for quick reaction and mission redirect events, increase the precision strike capability for high-value, short-dwell-time targets and increase day/night, all-weather operational capability. It will contribute greatly to the pilot's ability to "see and comprehend the battlefield" in all conditions; to rapidly collect, synthesize and disseminate battlefield information; and to take immediate and effective actions.

The RPA ATD will demonstrate the following quantitative measures of performance beyond RAH-66 performance during 24-hour, all-weather battlefield conditions: a 30 to 60 percent reduction in mission losses, a 50 to 150 percent increase in targets destroyed and a 20 to 30 percent reduction in mission timelines. Supports: RAH-66 Comanche, AH-64 Apache improvements and has dual-use potential.

National Automotive Center (NAC): The National Automotive Center (NAC) leverages commercial industry's large investment in automotive technology research and development and initiates shared technology programs that are focused on benefiting military ground vehicle systems. The NAC, located at the Tank Automotive and Armaments Command (TACOM) is part of the Tank-Automotive Research, Development and Engineering Center (TARDEC). The NAC serves as the catalyst linking industry, academia and government agencies as a clearinghouse for the development and exchange of automotive technologies. The NAC executes collaborative research and development (R&D) contracts and other initiatives to capitalize on commercial industry's investment in well-defined, high return-on investment areas tied to key Army science and technology objectives related to advanced land combat. The NAC focuses collaborative R&D contracts on key military automotive technology thrust areas to include: mobility, electronics, logistics, safety and environmental protection with the goal of (a) improving the performance and endurance of ground vehicle fleets, and (b) reducing ground vehicle design, manufacturing, production, and operating and sustainment costs. Two-way industry/government technology transfer is pursued under the Cooperative Research and Development Agreements (CRADAs). The activities of the NAC are supported by other Government agencies via a linkage created under Memoranda of Agreement. These linkages permit the NAC to consolidate the collective expertise of federal government departments such as Energy, Transportation and Commerce and other DoD agencies.

The NAC sponsored a Collision Warning Safety Convoy in the fall of 1995 to demonstrate the use of commercial electronic equipment on military vehicles. The convoy visited Army and National Guard facilities to expose active troops to the technology. The convoy also went to Capital Hill to show law makers the benefits of dual need technology developments.

National Rotocraft Technology Center (NRTC): The National Rotocraft Technology Center (NRTC) is a timely, low-overhead catalyst for facilitating collaborative rotocraft research and development between NASA, DoD/Army and Navy, FAA, industry and academia. It will serve as the "modem" to cooperatively develop and implement a rotocraft technology plan and national strategy that can effectively address civil and military rotocraft needs. The effort will establish an aggressive and clearly focused approach to strengthening the U.S. rotocraft industry's ability to compete in the global market, creating new market opportunities for commercial rotocraft and ensuring the continued supremacy of this technology that is so critical to modern warfare.



National Rotorcraft Technology Center

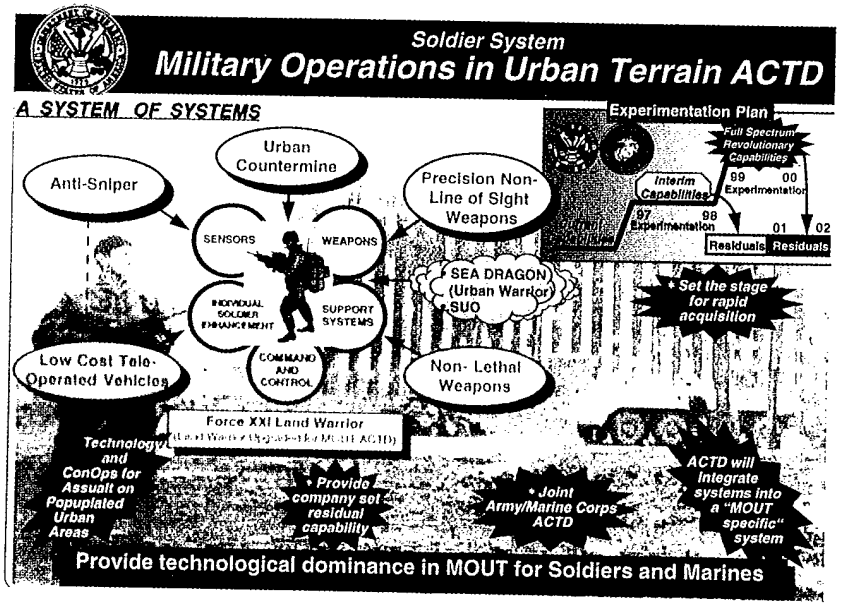
The NRTC adds an innovative approach to include U.S. industry and academia as partners through their focal point, the Rotocraft Industry Technology Association (RITA), a nonprofit corporation formed for this purpose. The focus of this innovative partnership will be the development of rotocraft design, engineering and manufacturing technologies and the sharing of the technology among RITA members.

U.S. industry will have a proactive role in defining the technology tasks to be undertaken. Initial strategic thrusts of the NRTC will address the following five critical path civil/military rotocraft issues: critical dual-use technologies, passenger and community (environmental/safety) acceptance, product and process development, aviation infrastructure, and civil and military standards.

Research project costs will be shared by government funding of $12 to $15 million per year and will be matched or exceeded by industry's participation. The initial participating organizations in the NRTC are as follows: NASA, DoD/Army/Navy, FAA, Bell Helicopter, Boeing Helicopters Division, McDonnell Douglas Helicopter, Sikorsky Aircraft, Pennsylvania State University, University of Maryland, Georgia Institute of Technology and the Naval Post-graduate School. The government office of the NRTC is located at Ames Research Center, Moffett Field, Calif., and will have a staff of seven people.

Direct Fire Lethality Advanced Technology Demonstration (ATD) (1998-02): The Direct Fire Lethality Program will enhance tank kinetic energy penetrator lethality, particularly against explosively reactive armor appliqué arrays, through use of a precursor defeat mechanism. The program will demonstrate range and lethality enhancements for tank munitions and demonstrate the emerging technologies needed to defeat the active protection system threat. In the near term, this project demonstrates advanced warhead concepts for Smart Target Activated Fire and Forget utilizing novel dual liner explosively formed penetrators (EFP) warhead to form an ultra-long EFP. In FY99, it will demonstrate a Smart Barrel Actuator active damping control of an M256 120mm gun tube in non-firing, dynamic tests. In FY01, the ATD will demonstrate improved probability of hit over the current M1A2 using Smart Barrel Actuators, fully integrated Gearless Turret/Gun Direct Drives, and Modern Digital Servo Control.

Military Operations in Urban Terrain (MOUT) (1998-02): The Military Operations in Urban Terrain (MOUT)-proposed joint (Army/Marine Corps) Advanced Concept and Technology Demonstration (ACTD) encompasses a breadth of technologies ranging from an advanced soldier system, advanced individual precision weapons, combat identification, counter-sniper, non-lethal weapons, advanced sensors, situational awareness and personal protection. The core capability that will be generated via the ACTD is a linkage of a series of advanced systems/components into a MOUT "System of Systems" whereby the components are interfaced, integrated or linked in an architecture to ensure their effective interoperability and functionality in the challenging MOUT environment. The integrated MOUT System of Systems will provide a robust and enhanced, joint operational capability encompassing the areas of urban command, control, communications, computers, and intelligence (C4I), Engagement and Force Protection.



Scout Vehicle Advanced Technology Demonstration (ATD) (97-01): The army has a requirement to replace High Mobility Multipurpose Wheeled Vehicles and Cavalry Fighting Vehicles in cavalry and scout ground units. The ATD responds to the User's requirements, and is coordinated via the Future Scout and Cavalry System (FSCS) Integrated Concept Team. The ATD will demonstrate the technical feasibility and operational potential of an affordable system optimized for the scout role. The demonstration phase will be conducted competitively, and it will be sufficiently robust so that the traditional demonstration and validation phase can be omitted, saving time and dollars. The ATD will also permit the user to refine the FSCS requirements prior to entering the engineering and manufacturing development phase.

Multifunction Staring Sensor Suite Advanced Technology Demonstration (ATD) (98-01): This ATD will demonstrate a modular, reconfigurable Multifunction Staring Sensor Suite (MFS3) that integrates multiple advanced sensor components including staring infrared imager, a multifunction laser, and acoustic arrays. The MFS3 will provide ground vehicles, amphibious assault vehicles, and surface ships with a compact, affordable sensor suite for long range noncooperative target identification, mortar/sniper fire location, and air defense against low signature targets. The infrared imaging system will be configured to accommodate either visible to mid infrared or far infrared focal plane arrays. As single focal planes capable of operating across the full optical spectrum mature, these may be inserted into the assembly. The staring infrared sensor will operate at high field rates to allow sniper and mortar detection in addition to the conventional target acquisition functions. Integration of a multifunction, multiwavelength laser system will incorporate ranging, range mapping, target profiling, and laser designation to support target location, target target cueing, aided target identification, and target designation. The acoustic array will provide target cueing, location, and assist in automated targeting functions. Supports: Future Scout Vehicle, Future Infantry Vehicle, Future Combat System.

System Contractors with ≥ 5% of total program value for FY97 are listed

Abrams
Allison Transmission: Indianapolis, IN;
General Dynamics: Lima, OH;
Warren/Sterling Heights, MI;
LITCO: Idaho Falls, ID;
Texas Instruments: Dallas, TX

Advanced Field Artillery Tactical Data System (AFATDS)
GTE : Taunton, MA;
Hughes: Fort Wayne, IN;
MILTOPE Corp.: Hope Hull, AL;
SAIC: San Diego, CA

Advanced Tank Armament System (ATAS)
General Dynamics: Sterling Heights, MI;
Texas Instruments: Plano, TX;
Western Howen Design: Irvine, CA

Advanced Quick Fix (AQF)
Lockheed Martin: Owego, NY

Aerostat
Hughes Raytheon: Bedford, MA;
Lockheed Martin: Akron, OH;
Northrop Grumman: Baltimore, MD

Air Defense Artillery (ADA) Tactical Operations Centers (TOCs)
TRW: Huntsville, AL

Airborne Reconnaissance Low (ARL)
California Microwave: Belcamp, MD;
TRW: Sunnyvale, CA

Airborne Standoff Minefield Detection System (ASTAMIDS)
Raytheon: Tewksbury, MA;
Westinghouse: Baltimore, MD

All Source Analysis System (ASAS)
BDM: McLean, VA;
California Microwave: Woodland Hills, CA;
Electronic Warfare Associates: Herndon, VA;
Jet Propulsion Laboratory: Pasadena, CA;
Lockheed Martin: San Jose, CA;
Littleton, CO; Pittsfield, MA;
Logicon: Arlington, VA;
Magnavox: Fort Wayne, IN;
MANTECH: Killeen, TX;
MITRE: McLean, VA;
Mystech: Falls Church, VA;
SAIC: San Diego, CA;
Sytex: McLean, VA

Apache Longbow
Allied Signal: Teterboro, NJ;
Lockheed Martin: Orlando, FL;
McDonnell Douglas: Mesa, AZ;
Northrup Grumman: Linthicum, MD

Armored Security Vehicle (ASV)
Textron: (Marine and Land Systems Division) New Orleans, LA

Army Data Distribution System (ADDS)
Bowmar Instrument: Fort Wayne, IN;
GEC-Marconi: San Marcos, CA; Totowa, NJ;
General Motors: (Hughes Electronics) El Segundo, CA; Forrest, MS;
HAC/Magnavox: Fort Wayne, IN;
ITT: Fort Wayne, IN;
Rockwell: Cedar Rapids, IA;
White Technology: Phoenix, AZ

Army Global Command and Control System (AGCCS)
Lockheed Martin: Springfield, VA

Army Tactical Missile System (Army TACMS)
Atlantic Research: Camden, AR;
Gainesville, VA;
Honeywell: Clearwater, FL; Minneapolis, MN;
KDI: Cincinnati, OH;
Lockheed Martin Vought Systems: Camden, AR; Dallas, TX;
Horizon City, TX;
Simmonds Precision: Cedar Knolls, NJ;
Spincraft: New Berlin, WI;
Teledyne: Hollister, CA; Los Angeles, CA;

Automatic Chemical Agent Detector/ Alarm (ACADA)
Graseby Dynamics: Watford, Herts, U.K.

Battlefield Combat Identification System (BCIS)
FMC: (United Defense, LP) San Jose, CA;
General Dynamics: Sterling Heights, MI;
Hughes: Fort Wayne, IN;
TRW: Redondo Beach, CA

Biological Integrated Detection System (BIDS)
Barry Controls: Brighton, MA;
Battelle: Columbus, OH;
Bio Road: Hercules, CA;
Booz Allen & Hamilton: McLean, VA;
Brucker Instruments: Billerica, MA;
Environmental Technology Group: Baltimore, MD;
Harris Corporation: Rochester, NY;
Kaman Sciences: Alexandria, VA;
Power & Engine Manufacturing: Minneapolis, MN;
Systems Research Corporation: Burlington, MA;
Thermal Systems: St. Paul, MN

Black Hawk
DOW-UT: Tallassee, AL;
General Electric: Lynn, MA;
United Technologies: Stratford, CT

Bradley Fire Support Team (BFIST) Vehicle
FMC: (United Defense Limited Partnership) San Jose, CA;
Systems Electronics: St. Louis, MO

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
HAC: LaGrange, GA;
Lockheed Martin: Pittsfield, MA;
MLS: San Jose, CA;
Texas Instruments: McKinney, TX;
FMC: (United Defense Limited Partnership) San Jose, CA; York, PA

Brilliant Anti-Armor Submunition (BAT)
Alliant Signal: Teterboro, NJ;
Alliant Techsystem: Hopkins, MN;
Honeywell: Minneapolis, MN;
Lockheed Martin Vought Systems: Grand Prairie, TX;
Baltimore, MD;
Northrop Grumman: Huntsville, AL; Hawthorne, CA; Baltimore, MD;
Olin: Redmond, WA;
Raytheon: Sudbury, MA;
Talley Defense: Mesa, AZ

CH-47 Chinook/Improved Cargo Helicopter (ICH)
Allied Signal: Phoenix, AZ;
Boeing Helicopters: Philadelphia, PA

Chemical Agent Monitor (CAM)
Intellitec Division: (Technical Products Group) DeLand, FL

Circuit Switch/Message Switch
California Microwave: Woodland Hills, CA;
GTE: Taunton, MA;
Laguna Industries: Albuquerque, NM;
LITTON: Van Nuys, CA

Close Combat Tactical Trainer (CCTT)
ECC International: Orlando, FL;
Evans & Sutherland: Salt Lake City, UT;
Lockheed Martin: Orlando, FL;
Pulau Electronics: Orlando, FL;

Comanche
AlliedSignal: Phoenix, AZ;
Boeing: Philadelphia, PA;
Lockheed Martin: Orlando, FL;
Rolls Royce/Allison Engine: Indianapolis, IN;
Sikorsky: Stratford, CT;
TRW: San Diego, CA

Combat Service Support Control System (CSSCS)
GTE: Taunton, MA;
LMC: Springfield, VA;
TRW Inc.: Carson, CA

Command and Control Vehicle (C2V)
Airflow: Fredericktown, MD;
Brunswick: DeLand, FL;
Cummins Engine: Columbus, IN;
Lockheed Martin: San Jose, CA;
FMC: (United Defense Limited Partnership) San Jose, CA; York, PA

Common Hardware/Software (CHS)
Carlyle Partners: (BDM International Inc.) Huntsville, AL;
GTE: Taunton, MA;
Hewlett Packard: Palo Alto, CA;
Magnavox: Fort Wayne, IN;
MILTOPE: Hope Hull, AL; Melville, NY;
SAIC: San Diego, CA;
Sun Microsystems: Mountain View, CA

Crusader
EDS: Herndon, VA;
FMC: (United Defense, LP) Minneapolis, MN;
General Dynamics: Sterling Heights, MI;
Lockheed Martin: Burlington, VT;
PRC: McLean, VA

Deployable Medical Systems (DEPMEDS)
Airtacs: Red Lion, PA;
BIOCHEM International: Waukesha, WI;
Brunswick: Marion, VA;
Eastman Kodak: Rochester, NY;
Engineered Systems: Trappe, PA;
Ohmeda Medical: Pleasanton, CA;
Outdoor Venture: Stearns, KY;
Picker: Cleveland, OH

Digital Transmission Assemblages
Aydin: San Jose, CA;
Centrair: Birmingham, AL;
Gichner Systems Group: Dallastown, PA;
Group Technologies: Tampa, FL;
Harris Corp.: Melbourne, FL;
Laguna Industries: Laguna Pueblo, NM;
Raytheon : Marlboro, MA;
Tobyhanna Army Depot: Tobyhanna, PA;
Transistor Devices: Cedar Knolls, NJ

Driver's Vision Enhancer (DVE)
Outsource Solution: McKinney, TX;
SAIC: San Diego, CA;
Texas Instruments: Dallas, TX

Enhanced Trackwolf (ET)
Engineering Research Associates: Vienna, VA

Extended Range Multiple Launch Rocket System (ER-MLRS)
KDI: Cincinnati, OH;
Lockheed Martin Vought Systems: Camden, AR; Dallas, TX;
Raytheon: Tewksbury, MA

Family Of Medium Tactical Vehicles (FMTV)
Allison: Indianapolis, IN;
Caterpillar: Peoria, IL;
McLaughlin: Moline, IL;
Michelin: Greenville, SC;
Rockwell International: Newark, OH;
Scott Manufacturing: Lubbock, TX;
Stewart & Stevenson Services: Houston, TX

Force Projection Tactical Operations Center (FP TOC)
Brown International: Huntsville, AL;
TRW: Dominguez Hills, CA

Force Provider (FP)
Dynamics Corp. of America: Bridgeport, CT;
EASI: St. Louis, MO;
IME: Duva, IL;
Microphor: Willits, CA;
Outdoor Venture: Stearns, KY;
Sierra Army Depot: Sierra, CA;
Teledyne: Huntsville, AL

Forward Area Air Defense Command and Control (FAADC^2)
TRW: Redondo Beach, CA

Grizzly
FMC: (United Defense, LP) York, PA;

Ground-Based Common Sensor (GBCS)
FMC: (United Defense, LP) Santa Clara, CA;
IBM: Owego, NY;
Lockheed Martin: (Lockheed-Sanders Corp. JV w/AEL) Hudson, NH;
Lockheed Martin: Owego, NY;
Magnavox: Fort Wayne, IN;
Motorola: Scottsdale, AZ;

Guardrail/ Common Sensor (GR/CS)
ESCO: St. Louis, MO;
IBM: Owego, NY;
Raytheon: (Beech Aircraft) Wichita, KS;
TRW: (TRW Inc.) Sunnyvale, CA;
UNISYS: Salt Lake City, UT

Heavy Equipment Transporter System (HETS)
Oshkosh Truck: Oshkosh, WI;
Systems and Electronics: St. Louis, MO

Hercules
FMC: (United Defense, LP) York, PA;

High Mobility Artillery Rocket System (HIMARS)
Lockheed Martin Vought Systems: Camden, AR; Dallas, TX

High Mobility Multipurpose Wheeled Vehicle (HMMWV)
AM General: South Bend, IN; Livonia, MI;
O'Gara, Hess and Eisenhardt: Fairfield, OH

Hornet
Textron: Wilmington, MA

Hydra 70 Rocket System
Lockheed Martin: Camden, AR;
Hercules: Radford, VA;
Radford Army Ammunition Plant: Radford, VA;
Thiokol: Brigham City, UT

Integrated Family of Test Equipment (IFTE)
MILTOPE: Hope Hull, AL;
Northrop-Grumman: Great River, NY;
SAIC: San Diego, CA

Integrated Meteorological System (IMETS)
Logicon: Arlington, VA; Tacoma, WA;
Sytex: McLean, VA

Integrated System Control (ISYSCON)
ACSI: Burlington, MA;
BBN Systems and Technologies: Cambridge, MA;
GTE: Taunton, MA; Raleigh, NC;
TRW: Carson, CA

Javelin
ECC International: Orlando, FL;
Lockheed Martin: Orlando, FL;
Texas Instruments: Lewisville, TX

Joint Service Lightweight Integrated Suit Technology (JSLIST)
Battelle: Stafford, VA

Joint Surveillance Target Attack Radar (Joint STARS) Ground Station Module (GSM)
Motorola: Scottsdale, AZ;

Joint Tactical Ground Station (JTAGS)
Datron: Simi Valley, CA;
GenCorp: (Aerojet) Azusa, CA;
Colorado Springs, CO;
Gichner Systems Group: Dallastown, PA;
Lockheed Martin: Boulder, CO;
MEVATECH: Huntsville, AL;
Response Service and Innovation: Austin, TX;
Silicon Graphics: Irvine, CA

Joint Tactical Terminal (JTT)
E-Systems: St. Petersburg, FL
Hughes: Fort Wayne, IN

Kiowa Warrior
Allison Engine: Indianapolis, IN;
Textron: Fort Worth, TX;
Honeywell: Albuquerque, NM;
McDonnell Douglas: Monrovia, CA

Laser HELLFIRE
Lockheed Martin: Ocala, FL; Orlando, FL;
Rockwell: Duluth, GA

Line-of-Sight Antitank (LOSAT)
Allied Signal: Cheshire, CT;
Lockheed Martin Vought Systems: Orlando, FL; Cambridge, MA; Dallas, TX; Bellevue, WA;
Texas Instruments: Dallas, TX;

Longbow Hellfire Missile
GEC-Marconi: Wayne, NJ;
Lockheed Martin: Orlando, FL;
Northrop Grumman: Baltimore, MD; Huntsville, AL;
TRW: Redondo Beach, CA

M113 Family of Vehicles (FOV)
Allison Transmission: Indianapolis, IN;
Detroit Diesel: Detroit, MI;
FMC: (United Defense, LP) Texarkana, TX;

Maneuver Control System (MCS)
CSC: Eatontown, NJ;
GTE: Taunton, MA; (Telos) Shrewsbury, NJ;
Lockheed Martin: Tinton Falls, NJ;
Mitre: Eatontown, NJ;
Telos: Shrewsbury, NJ

Medium Extended Air Defense System (MEADS)
There are two international contractor teams competing during the PD-V Phase.
MEADS Inc.: [(Hughes Raytheon con sortium: Bedford, MA; Huntsville, AL; Tucson, AZ; El Segundo, CA); (Alenia: Italy); (Deutsch Aerospace: Germany); (Siemens: Germany)];
MEADS International Inc.: [(Lockheed Martin: Orlando, FL; Huntsville, AL; Aquora Hills, CA); (Alenia, Italy); (Deutsch Aerospace: Germany); (Siemens: Germany)]

Medium Truck Remanufacture
Accutek: Walnut, CA;
Allison Transmissions: Indianapolis, IN;
AM General: South Bend, IN;
Caterpillar: Mossville, IN;
Hayes Wheels International: Romulus, MI;
Michelin Tire: Troy, MI

Milstar (Army)
CommQuest: Enchinitas, CA;
Harris: Melbourne, FL;
Lockheed Martin: Camden, NJ;
Rantee Microwave & Electronics: Calabasas, CA;
Raytheon: Marlboro, MA;
Rockwell: Richardson, TX;
Titan (Linkabit): San Diego, CA;
TRW: Redondo Beach, CA

Mobile Subscriber Equipment (MSE)
AM General: Livonia, MI;
Ericsson Radio Systems AB: Molndal, Sweden;
FN Manufacturing: Columbia, SC;
Gould: El Monte, CA;
GTE: Taunton, MA;
KECO Industries: Florence, KY;
Magnavox: Philadelphia, PA;
Raytheon: Marlboro, MA;
Telex Communications: Lincoln, NE;
Thomson CSF: Laval, Cholet & Toulouse, France

Mortar (120 mm)
Accudyne: Janesville, WI;
ARMTEC: Coachella, CA;
Brockway Standard: Homerville, GA;
Duchossois Industries: Scranton, PA;
Fermont: Bridgeport, CT;
FMS: Los Angeles, CA;
Hercules Inc.: Radford, VA;
KDI: Cincinnati, OH;
Lockheed Martin Vought Systems: Burlington, VT;
Lockheed Martin: Archibald, PA;
MMOS Milan Army Ammunition Plant: Milan, TN;
Olin: East Alton, IL;
Pine Bluff Arsenal: Pine Bluff, AR;
Radford Army Ammunition Plant: Radford, VA;
Red River Army Depot: Texarkana, TX;
Scranton Army Ammunition Plant: Scranton, PA;

United Ammunition Container: Milan, TN;
Watervliet Arsenal: Watervliet, NY

Multi-Purpose Individual Munition/ Short Range Assault Weapon (MPIM/SRAW)
GenCorp: (Aerojet) Sacramento, CA;
Lockheed Martin: Ranch Santa Margarita, CA

Multiple Launch Rocket System (MLRS)
Allied Signal: Teterboro, NJ;
Atlantic Research: Camden, AR;
Day & Zimm: Texarkana, TX;
Lockheed Martin Vought Systems: Camden, AR; Dallas TX;
FMC: (United Defense Limited Partnership) York, PA

National Missile Defense (NMD)
Hughes: El Segundo, CA; Tucson, AZ;
Lockheed Martin: Sunnyvale, CA;
Raytheon: Bedford, MA;
Rockwell: Downey, CA;
Teledyne Brown: Huntsville, AL

NAVSTAR Global Positioning System (GPS)
Rockwell: Cedar Rapids, IA;
Trumble Navigation: Sunnyvale, CA

Night Vision (NV) Image Intensification (I2)
Elbit: Haifa, Israel;
General Motors: (Hughes Electronics) El Segundo, CA;
ITT: Roanoke, VA;
Litton: Tempe, AZ;
Lockheed Martin: Orlando, FL; Nashua, NH;
Phototelesis: San Antonio, TX;
Texas Instruments: McKinney, TX;
TRACOR Aerospace: Austin, TX

Nuclear, Biological, and Chemical Reconnaissance System (NBCRS) - Fox
General Dynamics: (Land Systems Division) Warren, MI;
Anniston Army Depot: Anniston, AL;
Thyssen Henschel: (Germany)

Paladin
FMC: (United Defense, LP) Chambersburg, PA;
Honeywell: St. Petersburg, FL;
Letterkenny Army Depot: Chambersburg, PA;
Sechan Electronics: Littiz, PA;
Watervliet Arsenal: Watervliet, NY

Palletized Load System (PLS)
Allison: Indianapolis, IN;
Detroit Diesel: Detroit, MI;
Grove Crane: Shady Grove, PA;
Oshkosh Truck: Oshkosh, WI;
OTC Trailer: Bradenton, FL;
Rockwell: Troy, MI;
Steeltech: Milwaukee, WI

Patriot
Atlantic Research: Camden, AR; Gainesville, VA;
GTE: Taunton, MA;
Honeywell: Clearwater, FL; Minneapolis, MN;
Hughes: Torrance, CA;
J.L. Rust: Albuquerque, NM;
LITTON: Williamsport, PA;
Lockheed Martin Vought Systems: Grand Prairie, TX;
Lockheed/Sanders: Merrimack, NH;
Mountaingale: Reno, NV;
Parsvant: Melbourne, FL;
Raytheon: Bedford, MA;
Rockwell: Duluth, GA;
SCI Systems: Huntsville, AL

Protective Mask Family (M40 Series)
ILC Dover: Dover, DE;
Mine Safety Appliance: Pittsburgh, PA;
TSI: St. Paul, MN

Radiac
Nuclear Research Corp.: Dover, NJ

Remote Sensing Chemical Agent Detection (M21)
Intellitec: DeLand, FL

Satellite Communications (SATCOM)
Cincinnati Electronics: Cincinnati, OH;
GTE: Taunton, MA;
Harris: Melbourne, FL;
Lockheed Martin: Bethesda, MD;
Magnavox: Torrance, CA; Fort Wayne, IN;
Motorola: Scottsdale, AZ;
Raytheon: Marlborough, MA;
Stanford Electronics: Colorado Springs, CO;
Titan: San Diego, CA;

Second Generation Foward Looking Infrared (2d Gen FLIR)
General Motors: (Hughes Aircraft) El Segundo, CA;
Pentastar: Huntsville, AL;
Texas Instruments: McKinney, TX

Sense and Destroy Armor (SADARM)
Alliant Techsystems: Hopkins, MN;
Alpha Industries: Woburn, MA;
GenCorp (Aerojet): Azusa, CA;
LITTON: Tempe, AZ;
Teledyne: Los Angeles, CA

Sentinel
Brunswick: Marion, VA;
Electro-Tech: Blacksburg, VA;
Hughes: El Segundo, CA; .
Forrest, MS; Torrance, CA;
KINTEC: Dallas, TX;
LITTON: San Carlos, CA;
Lockheed Martin: Clearwater, FL;
Lucas Systems: Palo Alto, CA;
MA/COM: Burlington, MA;
NC Systems: Signal Hill, CA;
SAIC: San Diego, CA;
SoRa Electronics: Torrance, CA;
TMS: Polson, MT;
Varian: Beverly, MA;
Watkins Johnson: Palo Alto, CA;

Single Channel Ground and Airborne Radio System (SINCGARS)
General Dynamics: Tallahassee, FL;
ITT: Fort Wayne, IN;
Talla-Comm: Tallahassee, FL

Small Arms (M16A2 Rifle)
Colt's Manufacturing: Hartford, CT;
FN Manufacturing: Columbia, SC

Small Arms (M249 Squad Automatic Weapon)
FN Manufacturing: Columbia, SC

Small Arms (M4 Carbine)
Colt's Manufacturing.: Hartford, CT

Small Arms (MK-19-3 40 mm Automatic Grenade Launcher)
Duchossois Industries: (Saco Defense) Saco, ME

Smoke Generator (M56)
Robotic Systems Technology: Westminster, MD

Smoke Generator (M58)
Anniston Army Depot: Anniston, AL
Robotic Systems Technology: Westminster, MD

Soldier System
Aimpoint Inc: Herndon, VA;
Alliant Tech Systems: Hopkins, MN;
DECILOG: Melville, NY
Hughes: El Segundo, CA;
Motorola: Scottsdale, AZ;
OLIN: East Alton, IL
SARCO: Sterling, NJ;
Texas Instruments: San Antonio, TX;

Standard Army Management Information Systems (STAMIS)
Computer Sciences: Moorestown, NJ;
Lockheed Martin: Bethesda, MD;
PRC.: McLean, VA

Standardized Integrated Command Post System (SICPS)
Brunswick: Marion, VA;
Camel: Knoxville, TN;
FMC: (United Defense, LP) San Jose, CA;
Gichner Systems Group: Hunt Valley, MD;
Letterkenny Army Depot: Letterkenny, PA;
Tobyhanna Army Depot: Tobyhanna, PA

Stinger
Atlantic Research: Gainesville, VA;
CHIP Supply, Inc.: Orlando, FL;
Hughes: Tucson, AZ; Farmington, NM;
Honeywell: Minneapolis, MN

Tactical Endurance Synthetic Aperture Radar (TESAR)
Northrup Grumman: Baltimore, MD

Tactical High Energy Laser (THEL)
TRW: Redondo Beach, CA

Tactical Quiet Generators (TQG)
Dewey Electronics: Oakton, NJ;
Fermont: Bridgeport, CT;
Goodman Ball: Menlo Park, CA;
KECO Industries: Florence, KY;
MCII: Dallas, TX;
T and J Manufacturing: Oshkosh, WI

Tactical Unmanned Aerial Vehicle (TUAV)
Alliant Techsystems: Clearwater, FL; Hopkins, MN;
Cirrus Design: Duluth, MN;
GS Engineering: Incline Village, NV

Tactical Unmanned Vehicle (TUV)
TBD

Tank Main Gun Ammunition
Alliant-Ferralmatic Operations: Totowa, NJ;
Alliant-Radford: Radford, VA;
Alliant Technology: Clearwater, FL;
Alliant TechSystems: Brooklyn Park, MN;
ARMTEC: Coachella, CA;
Bulova: Lancaster, PA;
GenCorp: (Aerojet) Jonesboro, TN;
Hercules: Clearwater, FL; Radford, VA; Rocket City, WV;
Hexcel: Livermore, CA;
Mason and Hangar: Middletown, IA;
Motorola: Scottsdale, AZ;
Nuclear Metals: Concord, MA;

Olin: St. Petersburg, FL;
Olin-Flinchbaugh: Red Lion, PA;
Radford Army Ammunition Plant: Radford, VA

Task Force XXI Tactical Operations Centers (TOCS)
BIC: Huntsville, AL;
TRW: Huntsville, AL

Theater High Altitude Area Defense (THAAD) System
CRC: Huntsville, AL;
LITTON: Agoura Hills, CA;
Lockheed Martin: Huntsville, AL; Sunnyvale, CA; Lexington, MA; White Sands, NM;
Raytheon: Bedford, MA; Waltham, MA;
TRW: Redondo Beach, CA

Thermal Weapon Sight (TWS)
Aeroflex Laboratories: Plainview, NY;
General Motors: (Hughes Electronics) El Segundo, CA; (Hughes Georgia Inc.) LaGrange, GA; (Hughes Elcan Optical Technologies) Ontario, Canada; (Hughes Microelectronics Division) Newport Beach, CA; (Packard Hughes Interconnects) Irvine, CA; Santa Barbara Research Center: Santa Barbara, CA;
Zeis Eltro Optronics: Germany

TOW Improved Target Acquisition System (ITAS)
Cercon: Hillsboro, TX;
DY4 Systems: Ontario, Canada;
IMO (VARO): Garland, TX;
Keltec: Ft Walton Beach, FL;
Lockheed Martin: Syosset, NY;
OMI: Melbourne, FL;
Santa Barbara Research Center: Goleta, CA;
Texas Instruments: McKinney, TX

TOW Missle
Alliant Techsystems: VA;
Allied Signal: Cheshire, CT;
American Steel & Wire: Cleveland, OH; Cabot: PA;
Eagle Picher: Joplin, MO;
GenCorp: Azusa, CA;
General Motors: (Hughes Electronics) Tucson, AZ; Goleta, CA;
Kaiser Aluminum: Erie, PA;
Lockheed Martin: Archibald, PA;
Mason and Hanger: Middletown, IA;
Texas Instruments: Dallas, TX

Vehicle Teleoperation Capability (VTC)
Omnitech Robotics: Englewood, CO

Volcano
Alliant Tech Systems: Edina, MN;
Brunswick: Deland, FL;
Intellitech: Deland, FL;
Nomura Enterprise: Rock Island, IL;
S & K Electronics: Roman, MT

Wolverine
General Dynamics: Lima, OH; Sterling Heights, MI;
MAN GHH: Dusseldorf, Germany

System Contractors with ≥ 5% of total program value for FY97 are listed

ALABAMA

Advanced Field Artillery Tactical Data System (AFATDS)
MILTOPE: Hope Hull, AL

Air Defense Artillery (ADA) Tactical Operations Centers (TOCs)
TRW: Huntsville, AL

Black Hawk
DOW-UT: Tallassee, AL

Common Hardware/Software (CHS)
Carlyle Partners (BDM International): Huntsville, AL;
MILTOPE: Hope Hull, AL

Digital Transmission Assemblages
Centrair: Birmingham, AL

Force Projection Tactical Operations Center (FP TOC)
Brown International: Huntsville, AL

Force Provider (FP)
Teledyne: Huntsville, AL

Integrated Family of Test Equipment
MILTOPE: Hope Hull, AL

Joint Tactical Ground Stations (JTAGS)
MEVATECH: Huntsville, AL

Longbow Hellfire Missile
Northrup Grumman: Huntsville, AL

Medium Extended Air Defense System (MEADS)
MEADS Inc. (Hughes Raytheon consortium): Huntsville, AL;
MEADS International Inc. (Lockheed Martin): Huntsville, AL

National Missile Defense (NMD)
Teledyne Brown: Huntsville, AL

Nuclear, Biological, and Chemical Reconnaissance System (NBCRS)-Fox
Anniston Army Depot: Anniston, AL

Patriot
SCI Systems: Huntsville, AL

Second Generation Forward Looking Infrared (2d Gen FLIR)
Pentastar: Huntsville, AL

Smoke Generator (M58)
Anniston Army Depot: Anniston, AL

Task Force XXI Tactical Operations Centers (TOCs)
BIC: Huntsville, AL
TRW: Huntsville, AL

Theater High Altitude Area Defense (THAAD) System
CRC: Huntsville, AL;
Lockheed Martin: Huntsville, AL

ARIZONA

Apache Longbow
McDonnell Douglas: Mesa, AZ

Army Data Distribution System (ADDS)
White Technology: Phoenix, AZ

Brilliant Anti-Armor Submunition (BAT)
Talley Defense: Mesa, AZ

CH-47 Chinook/Improved Cargo Helicopter (ICH)
Allied Signals: Phoenix, AZ

Comanche
Allied Signal: Phoenix, AZ

Ground-Based Common Sensor (GBCS)
Motorola: Scottsdale, AZ

Joint Surveillance Target Radar (Joint STARS) Ground Station Module (GSM)
Motorola: Scottsdale, AZ

Medium Extended Air Defense System (MEADS)
MEADS Inc. (Hughes Raytheon consortium): Tucson, AZ

National Missile Defense
Hughes: Tucson, AZ

Night Vision (NV) Image Intensification (I2)
Litton: Tempe, AZ

Satellite Communications (SATCOM)
Motorola: Scottsdale, AZ

Sense and Destroy Armor (SADARM)
Litton: Tempe, AZ

Soldier System
Motorola: Scottsdale, AZ

Stinger
Hughes: Tucson, AZ

Tank Main Gun Ammunition
Motorola: Scottsdale, AZ

TOW Missile
General Motors (Hughes Electronics): Tucson, AZ

ARKANSAS

Army Tactical Missile System (Army TACMS)
Atlantic Research: Camden, AR;
Lockheed Martin Vought Systems: Camden, AR

Extended Range Multiple Launch Rocket System (ER-MLRS)
Lockheed Martin Vought Systems: Camden, AR

High Mobility Artillery System (HIMARS)
Lockheed Martin Vought Systems: Camden, AR

Hydra 70 Rocket System
Lockheed Martin: Camden, AR

Mortar (120 mm)
Pine Bluff Arsenal: Pine Bluff, AR

Multiple Launch Rocket System (MLRS)
Atlantic Research: Camden, AR;
Lockheed Martin Vought Systems: Camden, AR

Patriot
Atlantic Research Corp.: Camden, AR

CALIFORNIA

Advanced Field Artillery Tactical Data Systems (AFATDS)
SAIC: San Diego, CA

Advanced Tank Armament System (ATAS)
Western Howen Design: Irvine, CA

Airborne Reconnaissance Low (ARL)
TRW: Sunnyvale, CA

All Source Analysis (ASAS)
California Microwave: Woodland Hills, CA;
Jet Propulsion Laboratory: Pasadena, CA;
Lockheed Martin: San Jose, CA;
SAIC: San Diego, CA

Army Data Distribution System (ADDS)
GEC-Marconi: San Marcos, CA;
General Motors (Hughes Electronics): El Segundo, CA

Army Tactical Missile System (Army TACMS)
Teledyne: Hollister, CA; Los Angeles, CA

Battlefield Combat Identification System (BCIS)
FMC (United Defense LP): San Jose, CA;
TRW: Redondo Beach, CA

Biological Integrated Detection System (BIDS)
Bio Road: Hercules, CA

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
FMC (United Defense LP): San Jose, CA;
MLS: San Jose, CA

Bradley Fire Support Team (BFIST) Vehicle
FMC (United Defense LP): San Jose, CA

Brilliant Anti-Armor Submunition (BAT)
Northrop Grumman: Hawthorne, CA

Circuit Switch/Message Switch
California Microwave: Woodland Hills, CA;
Litton: Van Nuys, CA

Comanche
TRW: San Diego, CA

Combat Service Support Control System (CSSCS)
TRW: Carson, CA

Command and Control Vehicle (C2V)
FMC (United Defense LP): San Jose, CA;
Lockheed Martin: San Jose, CA

Common Hardware/Software (CHS)
Hewlett Packard: Palo Alto, CA;
SAIC: San Diego, CA;
Sun Microsystems: Mountain View, CA

Deployable Medical Systems (DEPMEDS)
Ohmeda Medical: Pleasanton, CA

Digital Transmission Assemblages
Aydin: San Jose, CA

Driver's Vision Enhancer (DVE)
SAIC: San Diego, CA

Force Projection Tactical Operations Center (FP TOC)
TRW: Dominguez Hills, CA

Force Provider (FP)
Microphor: Willits, CA;
Sierra Army Depot: Sierra, CA

Forward Area Air Defense Command and Control ($FAADC^2$)
TRW: Redondo Beach, CA

Ground-Based Common Sensor (GBCS)
FMC (United Defense LP): Santa Clara, CA

Guardrail/Common Sensor (GR/CS)
TRW: Sunnyvale, CA

Integrated Family of Test Equipment (IFTE)
SAIC: San Diego, CA

Integrated System Control (ISYSCON)
TRW: Carson, CA

Joint Tactical Ground Station (JTAGS)
Datron: Simi Valley, CA;
GenCorp (Aerojet): Azusa, CA;
Silicon Graphics: Irvine, CA

Kiowa Warrior
McDonnell Douglas: Monrovia, CA

Longbow Hellfire Missile
TRW: Redondo Beach, CA

Medium Extended Air Defense (MEADS)
MEADS Inc. (Hughes Raytheon consortium): El Segundo, CA;
MEADS International Inc. (Lockheed Martin): Aquora Hills, CA

Medium Truck Remanufacture
Accutek: Walnut, CA

Milstar
CommQuest: Enchinitas, CA;
Rantee Microwave & Electronics: Calabasas, CA;
Titan (Linkabit): San Diego, CA;
TRW: Redondo Beach, CA

Mobile Subscriber Equipment (MSE)
Gould: El Monte, CA

Mortar (120 mm)
ARMTEC: Coachella, CA;
FMS: Los Angeles, CA

Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW)
GenCorp (Aerojet): Sacramento, CA;
Lockheed Martin: Ranch Santa Margarita, CA

National Missile Defense
Hughes: El Segundo, CA;
Lockheed Martin: Sunnyvale, CA;
Rockwell: Downey, CA

NAVSTAR Global Positioning System (GPS)
Trumble Navigation: Sunnyvale, CA

Night Vision (NV) Image Intensification (I2)
General Motors (Hughes Electronics): El Segundo, CA

Patriot
Hughes: Torrance, CA

Satellite Communications (SATCOM)
Magnavox: Torrance, CA;
Titan: San Diego, CA;

Second Generation Forward Looking Infrared (2d Gen FLIR)
General Motors (Hughes Aircraft): El Segundo, CA

Sense and Destroy Armor (SADARM)
GenCorp (Aerojet): Azusa, CA;
Teledyne: Los Angeles, CA

Sentinel
Hughes: El Segundo, CA; Torrance, CA;
Litton: San Carlos, CA;
Lucas Systems: Palo Alto, CA;
NC Systems: Signal Hill, CA;
SAIC: San Diego, CA;
SoRa Electronics: Torrance, CA;
Watkins Johnson: Palo Alto, CA

Soldier System
Hughes: El Segundo, CA

Standardized Integrated Command Post System (SICPS)
FMC (United Defense LP): San Jose, CA

Tactical High Energy Laser (THEL)
TRW (Space and Technology Division): Redondo Beach, CA

Tactical Quiet Generators (TQG)
Goodman Ball: Menlo Park, CA

Tank Main Gun Ammunition
ARMTEC: Coachella, CA;
Hexcel: Livermore, CA

Theater High Altitude Area Defense (THAAD) System
Litton Data Systems: Agoura Hills, CA;
Lockheed Martin: Sunnyvale, CA;
TRW: Redondo Beach, CA

Thermal Weapon Sight (TWS)
General Motors: *(Hughes Electronics)* El Segundo, CA; *(Hughes Microelectronics Division)* Newport Beach, CA; *(Packard Hughes Interconnects)* Irvine, CA;
Santa Barbara Research Center: Santa Barbara, CA

TOW Improved Target Acquisition System (ITAS)
Santa Barbara Research Center: Goleta, CA

TOW Missile
GenCorp: Azusa, CA;
General Motors (Hughes Electronics): Goleta, CA

COLORADO

All Source Analysis System (ASAS)
Lockheed Martin: Littleton, CO

Joint Tactical Ground Station (JTAGS)
GenCorp (Aerojet): Colorado Springs, CO;
Lockheed Martin Federal Systems: Boulder, CO

Satellite Communications (SATCOM)
Stanford Electronics: Colorado Springs, CO

Vehicle Teleoperation Capability (VTC)
Omnitech Robotics: Englewood, CO

CONNECTICUT

Black Hawk
United Technologies: Stratford, CT

Comanche
Sikorsky: Stratford, CT

Force Provider (FP)
Dyamics Corp. of America: Bridgeport, CT

Line-of-Sight Antitank (LOSAT)
Allied Signal: Cheshire, CT

Mortar (120 mm)
Fermont: Bridgeport, CT

Small Arms (M16A2 Rifle)
Colt's Manufacturing: Hartford, CT

Small Arms (M4 Carbine)
Colt's Manufacturing: Hartford, CT

Tactical Quiet Generators (TQG)
Fermont: Bridgeport, CT

TOW Missile
Allied Signal: Cheshire, CT

DELAWARE

Protective Mask Family (M 40 Series)
ILC Dover: Dover, DE

FLORIDA

Apache Longbow
Lockheed Martin: Orlando, FL

Army Tactical Missile System (Army TACMS)
Honeywell: Clearwater, FL

Chemical Agent Monitor (CAM)
Intellitec Division (Technical Products Group): DeLand, FL

Close Combat Tactical Trainer (CCTT)
ECC International: Orlando, FL;
Lockheed Martin: Orlando, FL;
Pulau Electronics: Orlando, FL

Comanche
Lockheed Martin: Orlando, FL

Command and Control Vehicle (C2V)
Brunswick: DeLand, FL

Digital Transmission Assemblages
Group Technologies: Tampa, FL;
Harris Corp.: Melbourne, FL

Javelin
ECC International: Orlando, FL;
Lockheed Martin: Orlando, FL

Joint Tactical Terminal (JTT)
E-Systems: St. Petersburg, FL

Laser HELLFIRE
Lockheed Martin: Ocala, FL; Orlando, FL

Line-of-Sight Antitank (LOSAT)
Lockheed Martin Vought Systems: Orlando, FL

Longbow Hellfire Missile
Lockheed Martin: Orlando, FL

Medium Extended Air Defense System (MEADS)
MEADS International Inc. (Lockheed Martin Integrated Systems): Orlando, FL

Milstar
Harris: Melbourne, FL

Night Vision (NV) Image Intensification (I2)
Lockheed Martin: Orlando, FL

Paladin
Honeywell: St. Petersburg, FL

Palletized Load System (PLS)
OTC Trailer: Bradenton, FL

Patriot
Honeywell: Clearwater, FL;
Parsvant: Melbourne, FL

Remote Sensing Chemical Agent Detection (M21)
Intellitec: DeLand, FL

Satellite Communications (SATCOM)
Harris: Melbourne, FL

Sentinel
Lockheed Martin: Clearwater, FL

Single Channel Ground and Airborne Radio System (SINCGARS)
General Dynamics: Tallahassee, FL;
Talla-Comm: Tallahassee, FL

Stinger
CHIP Supply: Orlando, FL

Tactical Unmanned Aerial Vehicle (TUAV)
Alliant Techsystems: Clearwater, FL

Tank Main Gun Ammunition
Alliant Technology: Clearwater, FL;
Hercules: Clearwater, FL;
Olin: St. Petersburg, FL

TOW Improved Target Acquisition System (ITAS)
Keltec: Ft. Walton Beach, FL;
OMI: Melbourne, FL

Volcano
Brunswick: DeLand, FL;
Intellitech: DeLand, FL

GEORGIA

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
HAC: LaGrange, GA

Laser HELLFIRE
Rockwell: Duluth, GA

Mortar (120 mm)
Brockway Standard: Homerville, GA

Patriot
Rockwell: Duluth, GA

Thermal Weapon Sight (TWS)
General Motors (Hughes Georgia Inc.): LaGrange, GA

IDAHO

Abrams Tank
LITCO: Idaho Falls, ID

ILLINOIS

Family of Medium Tactical Vehicles (FMTV)
Caterpillar: Peoria, IL;
McLaughlin: Moline, IL

Force Provider (FP)
IME: Duva, IL

Mortar (120 mm)
Olin: East Alton, IL

Volcano
Nomura Enterprise: Rock Island, IL

INDIANA

Abrams Tank
Allison Transmission: Indianapolis, IN

Advanced Field Artillery Tactical Data System (AFATDS)
Hughes: Fort Wayne, IN

All Source Analysis (ASAS)
Magnavox: Fort Wayne, IN

Army Data Distribution System (ADDS)
Bowmar Instrument: Fort Wayne, IN;
HAC/Magnavox: Fort Wayne, IN;
ITT: Fort Wayne, IN

Battlefield Combat Identification System (BCIS)
Magnavox: Fort Wayne, IN

Comanche
Rolls Royce/Allison Engine: Indianapolis, IN

Command and Control Vehicle (C2V)
Cummins Engine: Columbus, IN

Common Hardware/Software (CHS)
Magnavox: Fort Wayne, IN

Family of Medium Tactical Vehicles (FMTV)
Allison Engines: Indianapolis, IN

Ground-Based Common Sensor (GBCS)
Magnavox: Fort Wayne, IN

High Mobility Multipurpose Wheeled Vehicle (HMMWV)
AM General: South Bend, IN

Joint Tactical Terminal (JTT)
Hughes: Fort Wayne, IN

Kiowa Warrior
Allsion Engines: Indianapolis, IN

M113 Family of Vehicles (FOV)
Allison Transmission: Indianapolis, IN

Medium Truck Remanufacture
Allison Transmissions: Indianapolis, IN;
AM General Corporation: South Bend, IN;
Caterpillar, Inc.: Mossville, IN

Palletized Load System (PLS)
Allison: Indianapolis, IN

Satellite Communications (SATCOM)
Magnavox: Fort Wayne, IN

Single Channel Ground and Airborne Radio System (SINCGARS)
ITT: Fort Wayne, IN

IOWA

Army Data Distribution System (ADDS)
Rockwell (Defense Electronics Division): Cedar Rapids, IA

NAVSTAR Global Positioning System (GPS)
Rockwell: Cedar Rapids, IA

Tank Main Gun Ammunition
Mason and Hangar: Middletown, IA

TOW Missile
Mason and Hangar: Middletown, IA

KANSAS

Guardrail/Common Sensor (GR/CS)
Raytheon (Beech Aircraft): Wichita, KS

KENTUCKY

Deployable Medical Systems (DEPMEDS)
Outdoor Venture: Stearns, KY

Force Provider (FP)
Outdoor Venture: Stearns, KY

Mobile Subscriber Equipment (MSE)
KECO Industries: Florence, KY

Tactical Quiet Generators (TQG)
KECO Industries: Florence, KY

LOUISIANA

Armored Security Vehicle (ASV)
Textron (Marine and Land Systems Division): New Orleans, LA

MAINE

Small Arms (MK-19-3 40 mm Automatic Grenade Launcher)
Duchossois Industries (Saco Defense): Saco, ME

MARYLAND

Aerostat
Northrop Grumman: Baltimore, MD

Airborne Reconnaissance Low (ARL)
California Microwave: Belcamp, MD

Airborne Standoff Minefield Detection System (ASTAMIDS)
Westinghouse: Baltimore, MD

Apache Longbow
Northrop Grumman: Linthicum, MD

Biological Integrated Detection System (BIDS)
Environmental Technology Group: Baltimore, MD

Brilliant Anti-Armor Submunition (BAT)
NG Electronic Sensors & Systems Division: Baltimore, MD

Command and Control Vehicle (C2V)
Airflow: Fredericktown, MD

Longbow Hellfire Missile
Northrop Grumman: Baltimore, MD

Satellite Communications (SATCOM)
Lockheed Martin: Bethesda, MD

Smoke Generator (M56)
Robotic Systems Technology: Westminster, MD

Smoke Generator (M58)
Robotic Systems Technology: Westminster, MD

Standard Army Management Information Systems (STAMIS)
Lockheed Martin: Bethesda, MD

Standardized Integrated Command Post System (SICPS)
Gichner Systems Group: Hunt Valley, MD

Tactical Endurance Synthetic Aperture Radar (TESAR)
Northrop Grumman: Baltimore, MD

MASSACHUSETTS

Advanced Field Artillery Tactical Data System (AFATDS)
GTE: Taunton, MA

Aerostat
Hughes Raytheon: Bedford, MA

Airborne Standoff Minefield Detection System (ASTAMIDS)
Raytheon: Tewksbury, MA

All Source Analysis System (ASAS)
Lockheed Martin: Pittsfield, MA

Biological Integrated Detection System (BIDS)
Barry Controls: Brighton, MA;
Brucker Instruments: Billerica, MA;
Systems Research Corporation: Burlington, MA

Black Hawk
General Electric: Lynn, MA

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
Lockheed Martin: Pittsfield, MA

Brilliant Anti-Armor Submunition (BAT)
Raytheon: Sudbury, MA

Circuit Switch/Message Switch
GTE: Taunton, MA

Combat Service Support Control System (CSSCS)
GTE: Taunton, MA

Common Hardware/Software (CHS)
GTE: Taunton, MA

Digital Transmission Assemblages
Raytheon: Marlboro, MA

Extended Range Multiple Lauch Rocket System (ER-MLRS)
Raytheon: Tewksbury, MA

Hornet
Textron (Textron Defense Systems): Wilmington, MA

Integrated System Control (ISYSCON)
ACSI: Burlington, MA;
BBN Systems and Technologies: Cambridge, MA;
GTE: Taunton, MA

Line of Sight Antitank (LOSAT)
Lockheed Martin Vought Systems: Cambridge, MA

Maneuver Control System (MCS)
GTE: Taunton, MA

Medium Extended Air Defense System (MEADS)
MEADS Inc. (Hughes Raytheon consortium): Bedford, MA

Milstar
Raytheon: Marlboro, MA

Mobile Subscriber Equipment (MSE)
GTE: Taunton, MA;
Raytheon: Marlboro, MA

National Missile Defense
Raytheon: Bedford, MA

Patriot
GTE: Taunton, MA;
Raytheon: Bedford, MA

Satellite Communications (SATCOM)
GTE: Taunton, MA;
Raytheon: Marlborough, MA

Sense and Destroy Armor (SADARM)
Alpha Industries: Woburn, MA

Sentinel
MA/COM: Burlington, MA;
Varian: Beverly, MA

Tank Main Gun Ammunition
Nuclear Metals: Concord, MA

Theater High Altitude Area Defense (THAAD) System
Lockheed Martin IRS: Lexington, MA;
Raytheon: Bedford, MA; Waltham, MA

MICHIGAN

Abrams Tank
General Dynamics: Sterling Heights, MI

Advanced Tank Armament System (ATAS)
General Dynamics: Sterling Heights, MI

Battlefield Combat Identification System (BCIS)
General Dynamics: Sterling Heights, MI

Crusader
General Dynamics: Sterling Heights, MI

High Mobility Multipurpose Wheeled Vehicle (HMMWV)
AM General: Livonia, MI

M113 Family of Vehicles (FOV)
Detroit Diesel: Detroit, MI

Medium Truck Remanufacture
Hayes Wheels: Romulus, MI;
Michelin Tire: Troy, MI

Mobile Subscriber Equipment (MSE)
AM General: Livonia, MI

Nuclear, Biological, and Chemical Reconnaissance System (NBCRS)-Fox
General Dynamics: Warren, MI

Palletized Load System (PLS)
Detroit Diesel: Detroit, MI;
Rockwell: Troy, MI

Wolverine
General Dynamics: Sterling Heights, MI

MINNESOTA

Army Tactical Missile System (Army TACMS)
Honeywell: Minneapolis, MN

Biological Integrated Detection System (BIDS)
Power & Engine Manufacturing: Minneapolis, MN;
Thermal Systems: St. Paul, MN

Brilliant Anti-Armor Submunition (BAT)
Alliant Techsystem: Hopkins, MN
Honeywell: Minneapolis, MN

Crusader
FMC (United Defense LP): Minneapolis, MN

Patriot
Honeywell: Minneapolis, MN

Protective Mask Family
TSI: St. Paul, MN

Sense and Destroy Armor (SADARM)
Alliant Techsystems: Hopkins, MN

Soldier System
Honeywell: Minneapolis, MN

Stinger
Honeywell: Minneapolis, MN

Tactical Unmanned Aerial Vehicle (TUAV)
Alliant Techsystems: Hopkins, MN;
Cirrus Design: Duluth, MN

Tank Main Gun Ammunition
Alliant TechSystems: Brooklyn Park, MN

Volcano
Alliant TechSystems: Edina, MN

MISSISSIPPI

Army Data Distribution System (ADDS)
General Motors (Hughes Electronics): Forrest, MS

Sentinel
Hughes: Forrest, MS

MISSOURI

Bradley Fire Support Team (BFIST) Vehicle
Systems Electronics Corp.: St. Louis, MO

Force Provider (FP)
EASI: St. Louis, MO

Guardrail/Common Sensor (GR/CS)
ESCO: St. Louis, MO

Heavy Equipment Transporter System (HETS)
Systems and Electronics: St. Louis, MO

TOW Missile
Eagle Picher: Joplin, MO

MONTANA

Sentinel
TMS: Polson, MT

Volcano
S & K Electronics: Roman, MT

NEBRASKA

Mobile Subscriber Equipment (MSE)
Telex Communications: Lincoln, NE

NEVADA

Patriot
Mountaingale: Reno, NV

Tactical Unmanned Aerial Vehicle (TUAV)
GS Engineering: Incline Village, NV

NEW HAMPSHIRE

Ground-Based Common Sensor (GBCS)
Lockheed Martin: Hudson, NH

Night Vision (NV) Image Intensification (I2)
Lockheed Martin (Lockheed Sanders Corp.): Nashua, NH

Patriot
Lockheed/Sanders: Merrimack, NH

NEW JERSEY

Apache Longbow
Allied Signal: Teterboro, NJ

Army Data Distribution System (ADDS)
GEC-Marconi: Totowa, NJ

Army Tactical Missile System (Army TACMS)
Simmonds Precision: Cedar Knolls, NJ

Brilliant Anti-Armor Submunition (BAT)
Alliant Signal: Teterboro, NJ

Digital Transmission Assemblages
Transistor Devices: Cedar Knolls, NJ

Longbow Hellfire Missile
GEC-Marconi: Wayne, NJ

Maneuver Control System (MCS)
CSC: Eatontown, NJ;
GTE (Telos): Shrewsbury, NJ;
Lockheed Martin: Tinton Falls, NJ;
MITRE: Eatontown, NJ;
Telos: Shrewsbury, NJ

Milstar
Lockheed Martin: Camden, NJ

Multiple Launch Rocket System (MLRS)
Allied Signal: Teterboro, NJ

Radiac
Nuclear Research: Dover, NJ

Standard Army Management Information Systems (STAMIS)
Computer Sciences: Moorestown, NJ

Tactical Quiet Generators (TQG)
Dewey Electronics: Oakton, NJ

Tank Main Gun Ammunition
Alliant-Ferralmatic Operations: Totowa, NJ

NEW MEXICO

Circuit Switch/Message Switch
Laguna Industries: Albuquerque, NM

Digital Transmission Assemblages
Laguna Industries: Laguna Pueblo, NM

Kiowa Warrior
Honeywell: Albuquerque, NM

Patriot
J.L. Rust: Albuquerque, NM

Stinger
Hughes: Farmington, NM

Theater High Altitude Area Defense (THAAD) System
Lockheed Martin: White Sands, NM

NEW YORK

Advanced Quick Fix (AQF)
Lockheed Martin: Owego, NY

Biological Integrated Detection System (BIDS)
Harris: Rochester, NY

Common Hardware/Software (CHS)
Stonebrook Group (MILTOPE): Melville, NY

Deployable Medical Systems (DEPMEDS)
Eastman Kodak: Rochester, NY

Ground-Based Common Sensor (GBCS)
Lockheed Martin: Owego, NY;
IBM: Owego, NY

Guardrail/Common Sensor (GR/CS)
IBM: Owego, NY

Integrated Family of Test Equipment (IFTE)
Northrop-Grumman: Great River, NY

Mortar (120 mm)
Watervliet Arsenal: Watervliet, NY

Paladin
Watervliet Arsenal: Watervliet, NY

Thermal Weapon Sight (TWS)
Aeroflex Laboratories: Plainview, NY

TOW Improved Target Acquisition System (ITAS)
Lockheed Martin: Syosset, NY

NORTH CAROLINA

Integrated System Control (ISYSCON)
GTE: Raleigh, NC

OHIO

Abrams Tank
General Dynamics: Lima, OH

Aerostat
Lockheed Martin: Akron, OH

Army Tactical Missile System (Army TACMS)
KDI: Cincinnati, OH

Biological Integrated Detection System (BIDS)
Battelle: Columbus, OH

Deployable Medical Systems (DEPMEDS)
Picker: Cleveland, OH

Extended Range Multiple Launch Rocket System (ER-MLRS)
KDI: Cincinnati, OH

Family of Medium Tactical Vehicles (FMTV)
Rockwell International: Newark, OH

High Mobility Multipurpose Wheeled Vehicle (HMMWV)
O'Gara, Hess and Eisenhardt: Fairfield, OH

Mortar (120 mm)
KDI: Cincinnati, OH

Satellite Communications (SATCOM)
Cincinnati Electronics: Cincinnati, OH

TOW Missile
American Steel & Wire: Cleveland, OH

Wolverine
General Dynamics: Lima, OH

PENNSYLVANIA

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
FMC (United Defense LP): York, PA

CH-47 Chinook/Improved Cargo Helicopter (ICH)
Boeing: Philadelphia, PA

Comanche
Boeing: Philadelphia, PA

Command and Control Vehicle (C2V)
FMC (United Defense LP): York, PA

Deployable Medical Systems (DEPMEDS)
Airtacs: Red Lion, PA;
Engineered Systems: Trappe, PA

Digital Transmission Assemblages
Gichner Systems Group: Dallastown, PA;
Tobyhanna Army Depot: Tobyhanna, PA

Grizzly
FMC (United Defense LP): York, PA

Hercules
FMC (United Defense LP): York, PA

Joint Tactical Ground Station (JTAGS)
Gichner Systems Group: Dallastown, PA

Mobile Subscriber Equipment (MSE)
Magnavox: Philadelphia, PA

Mortar (120 mm)
Duchossois Industries: Scranton, PA;
Lockheed Martin: Archibald, PA;
Scranton Army Ammunition Plant: Scranton, PA

Multiple Launch Rocket System (MLRS)
FMC (United Defense LP): York, PA

Paladin
FMC (United Defense LP): Chambersburg, PA;
Letterkenny Army Depot: Chambersburg, PA;
Sechan Electronics: Littiz, PA

Palletized Load System (PLS)
Grove Crane: Shady Grove, PA

Patriot
Litton: Williamsport, PA

Protective Mask Family (M40 Series)
Mine Safety Appliance: Pittsburg, PA

Soldier System
GENTEX: Carbondale, PA

Standardized Integrated Command Post System (SICPS)
Letterkenny Army Depot: Letterkenny, PA;
Tobyhanna Army Depot: Tobyhanna, PA

Tank Main Gun Ammunition
Bulova: Lancaster, PA;
Olin-Flinchbaugh: Red Lion, PA

TOW Missile
Cabot: PA;
Kaiser Aluminum: Erie, PA;
Lockheed Martin: Archibald, PA

SOUTH CAROLINA

Family of Medium Tactical Vehicles (FMTV)
Michelin: Greenville, SC

Mobile Subscriber Equipment (MSE)
FN Manufacturing: Columbia, SC

Small Arms (M16A2 Rifle)
FN Manufacturing: Columbia, SC

Small Arms (M249 Squad Automatic Weapon)
FN Manufacturing: Columbia, SC

TENNESSEE

Mortar (120 mm)
MMOS Milan Army Ammunition Plant: Milan, TN;
United Ammunition Container: Milan, TN

Standardized Integrated Command Post System (SICPS)
Camel: Knoxville, TN

Tank Main Gun Ammunition
GenCorp (Aerojet): Jonesboro, TN

TEXAS

Abrams Tank
Texas Instruments: Dallas, TX

Advanced Tank Armament System (ATAS)
Texas Instruments: Plano, TX

All Source Analysis (ASAS)
MANTECH: Killeen, TX

Army Tactical Missile System (Army TACMS)
Lockheed Martin Vought Systems: Dallas, TX; Horizon City, TX

Bradley M2 Infantry/M3 Cavalry Fighting Vehicle (IFV/CFV)
Texas Instruments: McKinney, TX

Brilliant Anti-Armor Submunition (BAT)
Lockheed Martin Vought Systems: Grand Prairie, TX

Driver's Vision Enhancer (DVE)
Outsource Solution: McKinney, TX;
Texas Instruments: Dallas, TX

Extended Range Multiple Launch Rocket System (ER-MLRS)
Lockheed Martin Vought Systems: Dallas, TX

Family of Medium Tactical Vehicles (FMTV)
Scott Manufacturing: Lubbock, TX;
Stewart & Stevenson Services: Houston, TX

High Mobility Artillery Rocket System (HIMARS)
Lockheed Martin Vought Systems: Dallas, TX

Javelin
Texas Instruments: Lewisville, TX

Joint Tactical Ground Station (JTAGS)
Response Service and Innovation: Austin, TX

Kiowa Warrior
Bell Helicopter Textron: Fort Worth, TX

Line-of-Sight Antitank (LOSAT)
Lockheed Martin Vought Systems: Dallas, TX;
Texas Instruments: Dallas, TX

M113 Family of Vehicles (FOV)
FMC (United Defense LP): Texarkana, TX

Milstar
Rockwell: Richardson, TX

Mortar (120 mm)
Red River Army Depot: Texarkana, TX

Multiple Launch Rocket System (MLRS)
Day & Zimm: Texarkana, TX;
Lockheed Martin Vought Systems: Dallas, TX

Night Vision (NV) Image Intensification (I2)
Phototelesis: San Antonio, TX;
Texas Instruments: McKinney, TX;
TRACOR Aersospace: Austin, TX

Patriot
Lockheed Martin Vought Systems: Grand Prairie, TX

Second Generation Forward Looking Infrared (2d Gen FLIR)
Texas Instruments: McKinney, TX

Sentinel
KINTEC: Dallas, TX

Tactical Quiet Generators (TQG)
MCII: Dallas, TX

TOW Improved Target Acquisition System (ITAS)
Cercon: Hillsboro, TX;
IMO (VARO): Garland, TX;
Texas Instruments: McKinney, TX

TOW Missile
Texas Instruments: Dallas, TX

UTAH

Close Combat Tactical Trainer (CCTT)
Evans & Sutherland: Salt Lake City, UT

Guardrail/Common Sensor (GR/CS)
UNISYS: Salt Lake City, UT

Hydra 70 Rocket System
Thiokol: Brigham City, UT

VERMONT

Crusader
Lockheed Martin: Burlington, VT

Mortar (120 mm)
Lockheed Martin Vought Systems: Burlington, VT

VIRGINIA

All Source Analysis System (ASAS)
BDM: McLean, VA;
Electronic Warfare Associates: Herndon, VA;
Logicon: Arlington, VA;
MITRE: McLean, VA;
Mystech: Falls Church, VA;
Sytex: McLean, VA

Army Global Command and Control System (AGCCS)
Lockheed Martin: Springfield, VA

Army Tactical Missile System (Army TACMS)
Atlantic Research: Gainesville, VA

Biological Integrated Detection System (BIDS)
Booz Allen & Hamilton: McLean, VA;
Kaman Sciences: Alexandria, VA

Combat Service Support Control System (CSSCS)
LMC: Springfield, VA

Crusader
EDS: Herndon, VA;
PRC: McLean, VA

Deployable Medical Systems (DEPMEDS)
Brunswick: Marion, VA

Enhanced Trackwolf (ET)
Engineering Research Associates: Vienna, VA

Hydra 70 Rocket System
Hercules: Radford, VA;
Radford Army Ammunition Plant: Radford, VA

Integrated Meteorological System (IMETS)
Logicon: Arlington, VA;
Sytex: McLean, VA

Joint Service Lightweight Integrated Suit Technology (JSLIST)
Battelle: Stafford, VA

Mortar (120 mm)
Hercules: Radford, VA;
Radford Army Ammunition Plant: Radford, VA

Night Vision (NV) Image Intensification (I2)
ITT: Roanoke, VA

Patriot
Atlantic Research: Gaineville, VA

Sentinel
Brunswick: Marion, VA;
Electro-Tech: Blacksburg, VA

Standard Army Management Information Systems (STAMIS)
PRC: McLean, VA

Standardized Integrated Command Post System (SICPS)
Brunswick: Marion, VA

Stinger
Atlantic Research: Gainesville, VA

Tank Main Gun Ammunition
Alliant-Radford: Radford, VA;
Hercules: Radford, VA;
Radford Army Ammunition Plant: Radford, VA

TOW Missile
Alliant Techsystems: VA

WASHINGTON

Brilliant Anti-Armor Submunition (BAT)
Olin: Redmond, WA

Integrated Meteorological System (IMETS)
Logicon: Tacoma, WA

Line-of-Sight Antitank (LOSAT)
Lockheed Martin Vought Systems: Bellevue, WA

WEST VIRGINIA

Tank Main Gun Ammunition
Hercules: Rocket City, WV

WISCONSIN

Army Tactical Missile System (Army TACMS)
Spincraft: New Berlin, WI

Deployable Medical Systems (DEPMEDS)
BIOCHEM International: Waukesha, WI

Heavy Equipment Transporter System (HETS)
Oshkosh Truck: Oshkosh, WI

Mortar (120 mm)
Accudyne: Janesville, WI

Palletized Load System (PLS)
Oshkosh Truck: Oshkosh, WI;
Steeltech: Milwaukee, WI

Tactical Quiet Generators (TQG)
T and J Manufacturing: Oshkosh, WI

OTHER COUNTRIES

CANADA

Thermal Weapon Sight (TWS)
General Motors (Hughes Elcan Optical Technologies): Ontario, Canada

TOW Improved Target Acquisition System (ITAS)
DY4 Systems: Ontario, Canada

FRANCE

Mobile Subscriber Equipment (MSE)
Thomson CSF: Laval, Cholet & Toulouse, France

GERMANY

Medium Extended Air Defense System (MEADS)
Deutsch Aerospace: Germany;
Siemens: Germany

Nuclear, Biological, and Chemical Reconnaissance System (NBCRS)-Fox
Thyssen Henschel: Germany

Thermal Weapon Sight (TWS)
Zeis Eltro Optronics: Germany

Wolverine
MAN GHH: Dusseldorf: Germany

ISRAEL

Night Vision (NV) Image Intensification (I2)
Elbit Ltd: Haifa, Israel

ITALY

Medium Extended Air Defense System (MEADS)
Alenia: Italy

SWEDEN

Mobile Subscriber Equipment (MSE)
Ericsson Radio Systems AB: Molndal, Sweden

UNITED KINGDOM

Automatic Chemical Agent Detector/Alarm (ACADA)
Graseby Dynamics: Watford, Herts, U.K.

Abrams:
Project Manager
Abrams Tank System
ATTN: SFAE-ASM-AB
Warren, MI 48397-5000

Advanced Field Artillery Tactical Data System (AFATDS):
Product Manager
AFATDS
ATTN: SFAE-C3S-FS
Ft. Monmouth, NJ 07703

Advanced Tank Armament System (ATAS):
Project Manager
Tank Main Armament Systems (PM-TMAS)
ATTN: SFAE-AR-TMA
Picatinny Arsenal, NJ 07806-5000

Advanced Quick Fix (AQF):
Project Manager
Signals Warfare
ATTN: SFAE-IEW-SG
Vint Hill Farms Station
Warrenton, VA 22186-5116

Aerostat:
Project Manager
U.S. Army Space and Strategic Defense Command
P.O. Box 1500
Huntsville, AL 35807

Air Defense Artillery (ADA) Brigade Tactical Operations Centers (TOCs)
Project Manager
U.S. Army Missile Command
ATTN: SFAE-C3S-AD
Redstone Arsenal, AL 35898-5600

Airborne Reconnaissance Low (ARL):
Project Manager
Signals Warfare
ATTN: SFAE-IEW-SG
Vint Hill Farms Station
Warrenton, VA 22186-5116

Airborne Standoff Minefield Detection System (ASTAMIDS):
Project Manager
Mines, Countermine, and Demolitions
Building 162N
Picatinny Arsenal, NJ 07806-5000

All Source Analysis System (ASAS):
Project Manager
All Source Analysis System
1616 Anderson Rd.
McLean, VA 22102-1616

Apache Longbow:
Product Manager
Longbow Apache
ATTN: SFAE-AV-LB
4300 Goodfellow Boulevard.
St. Louis, MO 63120-1795

Armored Security Vehicle (ASV):
Program Executive Officer
Tactical Wheeled Vehicles
ATTN: SFAE-TWV-LTV
Warren, MI 48397-5000

Army Data Distribution System (ADDS):
Project Manager
TRCS
ATTN: SFAE-C3S-TRC
Ft. Monmouth, NJ 07703

Army Global Command and Control System (AGCCS):
Program Executive Office
Command, Control and Communications
Project Manager, STCCS
6052 Meade Road, Suite 101
Ft. Belvoir, VA 22060-5260

Army Tactical Missile System (Army TACMS):
Project Manager
Army TACMS
ATTN: SFAE-MSL-AT
Redstone Arsenal, AL 35898-5650

Automatic Chemical Agent Detector/Alarm (ACADA)
Project Manager
NBC Defense Systems
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010-5423

Office of Program Director
NBC Defense
ATTN: AMSCB-BD
Aberdeen Proving Ground, MD 21010-5423

Joint Program Office for Biological Defense Systems
ATTN: SFAE-BD/Skyline #3
5201 Leesburg Pike
Falls Church, VA 22041-3203

Battlefield Combat Identification System (BCIS):
Project Manager
Combat Identification
ATTN: SFAE-IEW-CI-BCIS
Ft. Monmouth, NJ 07703

Project Manager
Combat Identification
Skyline 6, Suite 309
Falls Church, VA 22041

Biological Integrated Detection System (BIDS):
Project Manager
NBC Defense Systems
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010-5423

Office of Program Director
NBC Defense
ATTN: AMSCB-BD
Aberdeen Proving Ground, MD 21010-5423

Joint Program Office for Biological Defense Systems
ATTN: SFAE-BD/Skyline #3
5201 Leesburg Pike
Falls Church, VA 22041-3203

Black Hawk:
Project Manager
Utility Helicopters
ATTN: SFAE-AV-BH
4300 Goodfellow Boulevard
St. Louis, MO 63120-1798

Bradley Fire Support Team (BFIST) Vehicle:
Product Manager
Bradley Fighting Vehicle System
ATTN: SFAE-ASM-BV
Warren, MI 48397-5000

Bradley M2 Infantry/ M3 Cavalry Fighting Vehicle (IFV/CFV):
Program Manager
Bradley Fighting Vehicle System
ATTN: SFAE-ASM-BV
Warren, MI 48397-5000

Brilliant Anti-Armor Submunition (BAT):
Project Manager
Army TACMS-BAT
ATTN: SFAE-MSL-AB
Redstone Arsenal, AL 35898-7998

CH-47D Chinook/Improved Cargo Helicopter (ICH)
Project Manager
Cargo Helicopters
ATTN: SFAE-AV-CH
4300 Goodfellow Blvd
St. Louis, MO 63120-1795

Chemical Agent Monitor (CAM):
Project Manager
NBC Defense Systems
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010-5423

Office of Program Director
NBC Defense
ATTN: AMSCB-BD
Aberdeen Proving Ground, MD 21010-5423

Joint Program Office for Biological Defense Systems
ATTN: SFAE-BD/Skyline #3
5201 Leesburg Pike
Falls Church, VA 22041-3203

Circuit Switch And Message Switch:
Project Manager
JTACS
ATTN: SFAE-C3S-JTC
Ft. Monmouth, NJ 07703

CECOM Commodity Command
ATTN: AMSEL-LC-MMR-T
Ft. Monmouth, NJ 07703

Close Combat Tactical Trainer (CCTT):
Product Manager
Central Florida Research Park
ATTN: AMCPM-CCTT
12350 Research Parkway
Orlando, FL 32826-3276

Army Materiel Command (AMC)
5001 Eisenhower Avenue
ATTN: AMCRD-S
Alexandria, VA 22333-0001

Comanche:
Project Manager
Comanche
ATTN: SFAE-AV-RAH (Bldg. 105)
4300 Goodfellow Boulevard
St. Louis, MO 63120-1795

Combat Service Support Control System (CSSCS):
Product Manager
CSSCS
6020 Meade Rd., Suite 103
Ft. Belvoir, VA 22060-5259

Command and Control Vehicle (C2V):
Product Manager
Command and Control Vehicle
ATTN: SFAE-ASM-BV
Warren, MI 48397-5000

Common Hardware/Software (CHS):
Project Manager
Common Hardware/ Software
ATTN: SFAE-C3S-CHS
Ft. Monmouth, NJ 07703-5402

Crusader:
Project Manager
Crusader
ATTN: SFAE-FAS-CR
Picatinny Arsenal, NJ 07806-5000

Deployable Medical Systems (DEPMEDS):
Commander
U.S. Army Medical Material Agency
ATTN: MCMR-MM-R
Frederick, MD 21702-5001

HQ, U.S. Army Aviation and Troop Command
4300 Goodfellow Boulevard.
ATTN: AMSAT-W-TV
St. Louis, MO 63120-1798

Digital Transmission Assemblages:
Project Manager
JTACS (P)
ATTN: SFAE-CM-MSC-CTS
Ft. Monmouth, NJ 07703

Commodity Command
CECOM-DMM
ATTN: AMSEL-LC-MMR-T
Ft. Monmouth, NJ 07703

Driver's Vision Enhancer (DVE):
Project Manager
NV/RSTA
10221 Burbeck Road, Suite 430
Ft. Belvoir, VA 22060-5806

Enhanced Trackwolf (ET):
Project Manager
Signals Warfare
ATTN: SFAE-IEW-SG
Vint Hill Farms Station
Warrenton, VA 22186-5116

Extended Range Multiple Launch Rocket System (ER-MLRS):
Project Manager
Multiple Launch Rocket System
ATTN: SFAE-MSL-ML-PGM
Redstone Arsenal, AL 35898-5650

Family of Medium Tactical Vehicles (FMTV):
Project Manager
FMTV
ATTN: SFAE-TWV-FMTV
Warren, MI 48397-5000

Force Projection Tactical Operations Center (FP TOC):
Product Manager
ADCCS Project Office
ATTN: SFAE-C3S-AD-CP
Redstone Arsenal, AL 35898

Force Provider (FP):
Product Manager
HQ, U.S. Army Aviation and Troop Command
ATTN: AMCPM-FP
4300 Goodfellow Boulevard
St. Louis, MO 63120-1798

Forward Area Air Defense Command and Control ($FAADC^2$):
Product Manager
ADCCS Project Office
ATTN: SFAE-C3S-AD
Redstone Arsenal, AL 35898

Grizzly:
Project Manager
Combat Mobility Systems
ATTN: SFAE-ASM-CV-B
Warren, MI 48397-5000

Ground Based Common Sensor (GBCS):
Project Manager
Signals Warfare
ATTN: SFAE-IEW-SG
Vint Hill Farms Station
Warrenton, VA 22186-5116

Guardrail/ Common Sensor (GR/CS):
Program Manager
Signals Warfare
ATTN: SFAE-IEW-SG
Vint Hill Farms Station
Warrenton, VA 22186-5116

Heavy Equipment Transporter System (HETS):
Program Executive Officer
Combat Support
ATTN: SFAE-CS
Warren, MI 48397-5000

Program Manager
Heavy Tactical Vehicles
ATTN: SFAE-CS-TVH
Warren, MI 48397-5000

Hercules:
Project Manager,
Combat Mobility Systems
ATTN: SFAE-ASM-CV-R
Warren, MI 48397-5000

High Mobility Artillery Rocket System (HIMARS):
Project Manager
MLRS
ATTN: SFAE-MSL-ML-SP
Redstone Arsenal, AL 35896

High Mobility Multipurpose Wheeled Vehicle (HMMWV):
Program Executive Officer
Tactical Wheeled Vehicles
ATTN: SFAE-TWV
Warren, MI 48397-5000

Project Manager
Tactical Vehicle Special Programs
ATTN: SFAE-CS-TVSP
Warren, MI 48397-5000

Hornet:
Project Manager
Mines, Countermine, and Demolitions
ATTN: SFAE-ASM-MCD
Picatinny Arsenal, NJ 07806-5000

HYDRA 70 Rocket System:
Chief, Hydra-70/2.75 Inch Rocket Management Office
ATTN: AMSMC-ASH
Rock Island, IL 61299-6000

Integrated Family of Test Equipment (IFTE):
Product Manager
Automatic Test Support Systems
ATTN: PM-ATSS
Redstone Arsenal, AL 35898-5400

Integrated Meteorological System (IMETS)
Project Manager
White Sands Missile Range
ATTN: AMSAL-IS-EW
White Sands, NM 88002-5501

Integrated System Control (ISYSCON):
Project Manager
JTACS CECOM
ATTN: SFAE-C3S-JTC
(Product Manager, CMS)
Ft. Monmouth, NJ 07703

Javelin:
Project Manager
Javelin
ATTN: SFAE-MSL-AM
Redstone Arsenal, AL 35898-5720

Joint Service Lightweight Integrated Suit Technology (JSLIST):
Project Manager
JSLIST
10401 Totten Road, Suite 121
Fort Belvoir, VA 22060

Joint Surveillance Target Attack Radar System (Joint STARS) Ground Station Module (GSM):
Army Project Manager
Joint STARS
ATTN: SFAE-IEW-JS
Ft. Monmouth, NJ 07703-5304

Joint Tactical Ground Station (JTAGS):
Program Executive Office
Missile Defense
ATTN: SFAE-GPL-TMD-SS-P
P.O. Box 1500
Huntsville, AL 35807-3801

Joint Tactical Terminal (JTT):
Project Manager
Joint STARS
ATTN: SFAE-IEW-JS
Ft. Monmouth, NJ 07703-5304

Kiowa Warrior:
Project Manager
Kiowa Warrior
ATTN: SFAE-AV-ASH-T
4300 Goodfellow Boulevard
St. Louis, MO 63120-1798

Laser HELLFIRE:
Project Manager
Air-to-Ground Missile Systems
ATTN: SFAE-MSL-HD
Redstone Arsenal, AL 35898-5610

Line-of-Sight Antitank (LOSAT):
Project Manager
LOSAT
ATTN: SFAE-ASM-LS
Redstone Arsenal, AL 35898-8051

Longbow HELLFIRE:
Product Manager
Air-to-Ground Missile Systems
ATTN: SFAE-MSL-HD
Redstone Arsenal, AL 35898-5610

M113 Family of Vehicles (FOV):
Product Manager
U.S. Army Tank and Automotive Command
AMCPM-M113
Warren, MI 48397-5000

Maneuver Control System (MCS):
Project Manager
Operations Tactical Data Systems
ATTN: SFAE-CC-MVR
Ft. Monmouth, NJ 07703-5405

Medium Extended Air Defense System (MEADS):
Project Manager
MEADS
ATTN: SFAE-MD-SM
Redstone Arsenal, AL 35898-5797

Medium Truck Remanufacture:
Program Executive Officer
Tactical Wheeled Vehicles
ATTN: SFAE-TWV-M
Warren, MI 48397-5000

Milstar (Army):
Program Manager
Milstar (Army)
ATTN: SFAE-C3S-MSA
Ft. Monmouth, NJ 07703

Mobile Subscriber Equipment (MSE):
Project Manager
JTACS
ATTN: SFAE-C3S-JTC
Ft. Monmouth, NJ 07703-5210

Mortar (120 mm):
Product Manager
U.S. Armament Research, Development, and Engineering Center
ATTN: AMCPM-MO
Picatinny Arsenal, NJ 07806-5000

Multiple Launch Rocket System (MLRS):
Project Manager
MLRS
ATTN: SFAE-MSL-ML
Redstone Arsenal, AL 35896

Multi-Purpose Individual Munition/ Short Range Assault Weapon (MPIM/SRAW):
Product Manager
MPIM/SRAW
ATTN: G31, Naval Surface Warfare Center
17320 Dahlgren Road
Dahlgren, VA 22448-5100

National Missile Defense (NMD):
Program Executive Office
ATTN: SFAE-MD-NMD
P.O. Box 1500
Redstone Arsenal, AL 358087-5801

NAVSTAR Global Positioning System (GPS):
Project Manager
GPS
ATTN: SFAE-C3-GPS
Ft. Monmouth, NJ 07703

Night Vision/ Reconnaissance, Surveillance & Target Acquisition (NV/RSTA):
Project Manager
NV/RSTA
10221 Burbeck Road, Suite 430
Ft. Belvoir, VA 22060-5806

NBC Reconnaissance System (NBCRS) Fox:
Project Manager
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010

Paladin:
Product Manager
Paladin/FAASV
ATTN: SFAE-FAS-PAL
Picatinny Arsenal, NJ 07806-5000

Palletized Load System (PLS):
Program Executive Officer
Tactical Wheeled Vehicles
ATTN: SFAE-TWV
Warren, MI 48397-5000

Program Manager
Palletized Load System
ATTN: SFAE-CS-PLS
Warren, MI 48397-5000

Patriot:
Product Manager
ATTN: SFAE-MD-PA
P.O. Box 1500
Huntsville, AL 35807-3801

Protective Mask (M40 Series):
Project Manager
NBC Defense
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010

Radiac:
Project Manager
NBC Defense Systems
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010-5423

Office of Program Director
NBC Defense
ATTN: AMSCB-BD
Aberdeen Proving Ground, MD 21010-5423

Joint Program Office for Biological Defense Systems
ATTN: SFAE-BD/Skyline #3
5201 Leesburg Pike
Falls Church, VA 22041-3203

Remote Sensing Chemical Agent Detection (M21):
Project Manager
NBC Defense Systems
ATTN: AMCPM-NN
Aberdeen Proving Ground, MD 21010-5423

Office of Program Director
NBC Defense
ATTN: AMSCB-BD
Aberdeen Proving Ground, MD 21010-5423

Joint Program Office for Biological Defense Systems
ATTN: SFAE-BD/Skyline #3
5201 Leesburg Pike
Falls Church, VA 22041-3203

Satellite Communications (SATCOM):
Project Manager
SATCOM
ATTN: SFAE-C3S-SC
Ft. Monmouth, NJ 07703

Program Manager
Milstar (Army)
ATTN: SFAE-C3-MSA
Ft. Monmouth, NJ 07703

Second Generation Forward Looking Infrared (FLIR):
Product Manager
GEN II FLIR
10221 Burbeck Road, Suite 430
Ft. Belvoir, VA 22060-5806

Sense and Destroy Armor (SADARM):
Project Manager
Sense and Destroy Armor
ATTN: SFAE-FAS-SD
Picatinny Arsenal, NJ 07806-5000

Sentinel:
Product Manager
FAAD Sensor
ATTN: SFAE-IEW-GSI
Redstone Arsenal, AL 35898-5796

Single Channel Ground and Airborne Radio System (SINCGARS):
Product Manager
TRCS
ATTN: SFAE-C3S-TRC
Ft. Monmouth, NJ 07703

Small Arms (M4 Carbine, M16A2 Rifle, MK19-3 40mm Automatic Grenade Launcher, M249 Squad Automatic Weapon):
Product Manager
Small Arms
U.S. Army Armament Research, Development, and Engineering Center
ATTN: AMCPM-SA
Picatinny Arsenal, NJ 07806-5000

Smoke Generator (M56):
Product Manager
Smoke/Obscurants
ATTN: AMCPM-SM
Aberdeen Proving Ground, MD 21010-5423

Smoke Generator (M58):
Product Manager
Smoke/Obscurants
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Aberdeen Proving Ground, MD 21010-5423

Soldier System:
Program Manager
Soldier
14050 Dawson Beach Rd.
Woodbridge, VA 22919

ATCOM
4300 Goodfellow Boulevard.
St. Louis, MO 63120

AMCCOM
ATTN: AMSMC-RT
Rock Island, IL 61299

CECOM
ATTN: AMSEL-RD
Ft. Monmouth, NJ 07703

Standard Army Management Information Systems (STAMIS):
Program Executive Office STAMIS
ATTN: SFAE-PS
Stop C-3
Ft. Belvoir, VA 22060-5895

Standardized Integrated Command Post System (SICPS):
Project Manager, Common Hardware/Software
Product Manager, SICPS
Ft. Monmouth, NJ 07703

Stinger:
FAAD Project Office
ATTN: SFAE-MSL-FAD
Redstone Arsenal, AL 35898-5630

Tactical Endurance Synthetic Aperture Radar (TESAR):
Product Manager
TESAR
Ft. Monmouth, NJ 07703-5000

Tactical High Energy Laser (THEL):
Project Manager
U.S. Army Space and Strategic Defense Command
P.O. Box 1500
Huntsville, AL 35807

Tactical Quiet Generators (TQG):
DoD Project Manager–Mobile Power
Mobile Electric Power
7500 Backlick Road
Springfield, VA 22150-3107

Department of the Army
HQ, U.S. Army Aviation and Troop Command
St. Louis, MO 63120-1798

Tactical Unmanned Aerial Vehicle (TUAV):
Project Manager
Joint Tactical Unmanned Aerial Vehicle
ATTN: PEO-CU-UAV
Redstone Arsenal, AL 35898-5791

Tactical Unmanned Vehicle (TUV):
Product Manager-TUV
Unmanned Ground Vehicles/Systems JPO
Attn: AMCPM-UG-TUV
Redstone Arsenal, AL 31898-8060

Tank Main Gun Ammunition:
Project Manager
Tank Main Armament Systems (PM-TMAS)
ATTN: SFAE-AR-TMA
Picatinny Arsenal, NJ 07806-5000

Task Force XXI Tactical Operations Centers (TOCs)
Project Manager
U.S. Army Missile Command
ATTN: SFAE-C3S-AD
Redstone Arsenal, AL 35898-5600

Theater High Altitude Area Defense (THAAD) System:
Project Manager
ATTN: SFAE-MD-THA
P.O. Box 1500
Huntsville, AL 35807-3801

Thermal Weapon Sight (TWS):
Project Manager
NV/RSTA
10221 Burbeck Road, Suite 430
Ft. Belvoir, VA 22060-5806

TOW Improved Target Acquisition System (ITAS):
Product Manager
ITAS
ATTN: SFAE-MSL-CC
Redstone Arsenal, AL 35898-5710

TOW Missile:
Project Manager
Close Combat Anti-Armor Weapon Systems
ATTN: SFAE-MSL-CC
Redstone Arsenal, AL 35898-5710

Vehicle Teleoperation Capability (VTC):
Product Manager-VTC
Unmanned Ground Vehicles/Systems JPO
Attn: AMCPM-UG-VTC
Redstone Arsenal, AL 35898-8060

Volcano:
Project Manager
Mines, Countermine, and Demolitions
ATTN: SFAE-ASM-MCD
Picatinny Arsenal, NJ 07806-5000

Wolverine:
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Combat Mobility Systems
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